# PUNJAB ADMINISTRATION REPORT

1913-1914

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# REPORT

ON THE

# ADMINISTRATION

OF THE



# PUNJAB AND ITS DEPENDENCIES

FOR

## 1913-1914.

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# PART I.

## GENERAL SUMMARY.

(The "year" throughout this report is not invariably the financial year ending 31st March 1914. At the heading of each chapter, with the exception of chapter I, a reference is given to the departmental reports which contain details of the subjects dealt with. The "year" of the present report is for each such subject the year mentioned in the title of the departmental report so referred to. In general it may be said that the "*year*" *in chapters I, IV, V, VII, VIII* and IX means the financial year ending 31st March 1914, in chapter II *it is the* revenue year ending 30th September 1913, and in chapters III and VI it is the calendar year ending 31st December 1913.

The Administration Report for 1911-12 was a decennial report, and as such contained many sections of permanent interest to which reference may be necessary in order to understand *the* working *of the* Administration; under the orders of the Government of India these sections are not repeated each year, but a reference is given to them in their place in the several chapters of part II of this report.

Except where otherwise stated, the Punjab in this report refers to the Punjab as *at present* constituted.)

### CHANGES IN THE ADMINISTRATION.

1. Sir Louis Dane, G.C.I.E., C.S.I., D.O.L., held charge of the office of Lieutenant-Governor of the Punjab till 26th May 1913, when he retired from *the* service and was succeeded by Sir Michael O'Dwyer, K.C.S.I. **Personnel.**

2. A scheme for the re-organization of the higher branch of the judiciary of the Province has been sanctioned, the court of the District Judge as hitherto known to the Province disappearing and the position of District and Sessions Judges being assimilated to that occupied by these Judges in the older "Regulation" Provinces. Simultaneously with this change a re-grading of the superior Executive Branch of the service was introduced, under which the number of Deputy Commissioners was increased by nine so as to include in the regular cadre certain seconded posts; an improvement in the grading of Deputy Commissioners by placing 14 in each grade was at the same time sanctioned. **General.**

## Relations with Tributary States.

3. The most important facts in the political administration of the year were the withdrawal of the Baháwalpur State from the Phulkián States Agency, and the formation of a new Political Agency for the States of Baháwalpur, Máler Kotla and Farídkot.

There were few events of striking importance in the history of any of the States, perhaps the most important being a change in the form of administration of Patiála where the Prime Minister and Home Minister retired and the administration was taken over by six Secretaries acting under the direct supervision of the Maharaja.

## Frontier Affairs.

Baluchistan.

4. During 1913-14 the Baluch Border gave no trouble, though the number of cases for disposal by Jirga, both civil and criminal, increased.

## Condition of the People.

5. The year was on the whole a prosperous one. Both harvests were good, except in the south-eastern part of the Province; high prices prevailed and wages were also high; the birth rate was higher than in any year since 1900, and the death rate only slightly exceeded that of the exceptionally healthy preceding year. The mortality from plague diminished very greatly and that from fever was normal; an epidemic of cholera occurred, but, though widespread, it was localized in intensity and was kept in check; the small-pox epidemic, which was a legacy from the previous year, was the only serious one.

In towns credit received a severe shock from the failure of several well-known Indian banks and the consequent failure of many companies; the effect of this financial crisis will be felt for a considerable time, though the crisis will give a much needed check to rash enterprises and investments. One bright feature of the storm was the fact that no Co-operative Credit Society or Bank was *wrecked in it* which shows the stability of this modern [illegible] village communal life.

## Administration of the Land.

Land Revenue.

6. The fixed land revenue demand of the Province is just under 213 lakhs and more than 97 per cent. of this was collected—a fact which proves that the resources of the *zamindars in recently* re-assessed districts are fully capable of meeting the increased demand.

The fluctuating land revenue, partly owing to re-assessments of colony areas and partly to favourable river floods, again shows a large increase, having risen from 87 to nearly 110 lakhs. This continued increase is one of the most remarkable features in recent land revenue history; in 1892 the fluctuating land revenue was only $\frac{1}{20}$ of the fixed land revenue, in 1901 this proportion had increased to $\frac{1}{9}$, in 1911 to $\frac{1}{4}$ and now stands at more than $\frac{1}{2}$, practically all of which was collected, a fact which bears eloquent testimony to the leniency of the demand and the efficiency of the collecting agency. The smooth running of the machinery for collection is a matter which is liable

to escape notice, but may be realized when it is considered that in only 11 cases was it found necessary to resort to imprisonment and in only 38 cases to resort to the sale of property, 36 of these being sales of moveable and 2 of immoveable property.

## Settlement, Survey and Land Records.

7. Ten settlements were in progress during the year and those which were completed resulted in substantial increases of revenue. The new assessments were easily met, and the value of land shows a steady and substantial rise. The Survey Department continued its useful work in riverain tracts and in providing frame-works for subsequent cadastral survey. Settlements and Land Records.

The general revision of the land records of a district has always been a part of a Settlement Officer's duties, but, with a view to minimising the expense and duration of settlements, it was thought advisable to try the system of having maps corrected and records revised in districts about to come under settlement before the Settlement Officer entered upon his duties. This system has been found impracticable and in some ways undesirable, as the revision of the records is one of the main ways by which a Settlement Officer comes into touch with the people and is regarded as their representative as much as the representative of Government. Reciprocity between the settlement and the ordinary land revenue staff, however, has always existed and a recent development of this is the introduction of the scheme known as amalgamation of the district and settlement kanungo staff, under which some candidates for posts on the district kanungo establishment are trained in the Settlement Department.

An interesting experiment in decentralization on a small scale is being tried by conferring limited powers of attestation in mutation cases on kanungos employed in *settlement.*

8. The Lower Chenab, Lower Jhelum and Chunian Colonies continued to prosper, though the cultivated area on the Lower Chenab fell off slightly owing to the early cessation of the monsoon and perhaps also *to the* abolition of the system of [illegible] under which land revenue and canal dues were not levied if the crop failed to mature; this system encouraged gambling on rain, *the* cultivator tending to sow more land than he could possibly hope to mature by means of canal water and a normal rain supply, and its abolition naturally affected the extent of the area cultivated. Canal Colonies.

Allotment in those colonies is now almost at an end, and though still presenting features in administration which require special attention, their administration is assimilating more and more to that of an ordinary district. It is in these new colonies that enterprise and a progressive spirit should specially appear and this is evident in the rapid progress of the co-operative movement in all its phases, in the establishment by private enterprise of towns such as Warburton and Nankána and in the success of the Zamindar Trading Company in the Lower Jhelum Colony which sold 87 lakhs worth of grain during the year. Re-assessment on the Lower Chenab has resulted in a substantial increase of revenue, and the re-assessment on the Lower Jhelum has been accepted without demur.

Some laxity in the fulfilment of conditions on the part of service grantees has been firmly but sympathetically dealt with, and an improvement has taken place.

Preliminary work in the Lower Bari Doab Colony is proceeding, colonization has been begun on the Upper Chenab, and the Upper Jhelum Colony scheme has been submitted to Government.

Court of Wards.

9. Passing from enterprises started by the State, another feature of paternal government is found in the management of estates under the Court of Wards. No new estates have been taken under management, but three have been released, each with a large surplus and all debts paid up. Apart from these, the total liabilities of the estates under the Court are less by Rs. 1,61,000 than they were last year. In the management of such estates Government have excellent opportunities of giving actual illustrations, apart from mere advice, of what can be done by new developments, as, for instance, in sheep, horse and cattle breeding and in fruit culture. In all these ways progress has been made during the year, and one specially enterprising estate has started a grain market and also a tenants' co-operative society and a weaving school.

Revenue and Rent-paying Classes.

10. The general prosperity of the agriculturist has already been alluded to. The growth of the co-operative movement is dealt with below, and it is here only necessary to note the steadily increasing tendency among agriculturists to utilize advances from co-operative societies for the purposes to which Government loans are generally applied, and the continued beneficial effect of the Land Alienation Act in confining the interest of non-agricultural tribes in the land to temporary occupation, while there is no evidence to show that the Act is working mainly in the interests of large investors who are members of agricultural tribes.

PROTECTION.

Police.

11. Though poverty is one of the chief incentives to crime, it by no means follows that economic prosperity at once results in the creation of a law-abiding spirit. This is especially so in a country where party feeling is still rife and where the attempt of Government to eradicate oriental methods of investigation has not yet been followed by the development on the part of the public in general of a feeling of their responsibility to help in the prevention and detection of crime. Though the deplorable increase of crime of recent years has at last apparently received a check, yet the situation is still serious, there having been an increase in the number of murders and only a slight decrease in the number of dacoities which are still three times what they were in 1909; cases of assaults on the police and other officials while in execution of their duties are also still much in evidence. Measures have been taken to cope with the situation by strengthening the mounted police force and by establishing new police stations and posts, the cost of many of these being defrayed by punitive cesses. Special attention is also being paid to strengthening the prosecuting agency and to accelerating the disposal of cases, as it is recognized that there is a relationship between the number of convictions and the speedy disposal of cases. The statistics of

cognisable cases against the State and the person and property of individuals returned as true show that only 44 per cent. were brought to trial and of these only 68 per cent. resulted in conviction, while of these again many are reversed on appeal. These statistics are, however, on the whole, somewhat better than last year, and there has been a marked rise in the percentage of convictions in murder cases. Proposals for the amendment of the law, particularly of the security sections, have been made in several quarters and the introduction of the Frontier Crimes Regulation to the trans-Jhelum districts has also been recommended. If the situation does not improve, these proposals will be taken up.

12. This subject overlaps the above paragraph, and only a few other matters fall to be noticed in connection with non-cognizable crime and the working of the courts. Criminal Justice.

On the whole, including both cognizable and non-cognizable crimes, there has been a reduction in the number of offences reported and also of true cases; and there has been an improvement in the proportion of cases brought to trial, while the percentage of cases resulting in conviction or compromise has increased from 70 to 71, the percentage of convictions alone being 36 or, after allowing for releases on appeal, about 26.

Matrimonial offences and connected questions, except where they are accompanied by acts of violence, do not come within the cognizance of the police, but are still much too common, though the number of cases returned as true has sunk from 6,244 to 5,650. The movement in favour of registration of marriages is spreading, but definite measures on a large scale cannot be [illegible]en till public opinion supports the measure.

The Labourers' *Act* (XIII of 18[illegible]9), has again come in for much criticism, but the Chief Engineers in both branches of the Public Works Department have given their opinion in favour of its retention. The working of this *Act* has, however, [illegible]fully watched, as its objects are often misunderstood and it [illegible] to become an instrument of tyranny in the hands of unscrupulous contractors.

Something has been done since the close of the year to remedy a very frequent cause of complaint by raising the rates of diet money payable to witnesses.

*13.* The increase in crime in the last few years and the tendency towards longer terms of imprisonment has strained the available accommodation in the jails, and proposals for the construction of a new central jail at Jullundur are now before Government. The daily average population of the jails has this year amounted to 13,613. Prisons.

The methods of jail administration have been changing in recent years, the tendency being to induce prisoners to do good work by the hope of rewards in the shape of remission rather than to coerce them to work by the threat of punishment. This change in method has resulted in a large decrease in the number of prison offences which have dwindled to 29,461 as compared with 33,724 in 1912 and 56,837 in 1908. The efficiency of work does not seem to have suffered and the prisoners

thoroughly understand the remission system. While such humane treatment has a humanising influence over many convicts, the punitive and deterrent aspects of punishment must also be kept fully in view.

A humane and reformative treatment is much more likely to have a permanent effect on adolescent prisoners, and this is recognised in the Borstal Central Jail at Lahore for adolescents where reformation is the key-note of administration. Nearly a thousand young men are kept in this jail and progress has been made in the application of Borstal methods, though much yet remains to be done before the institution can be regarded as complete, and it is still too early to discuss the results of this experiment.

**Civil Justice.**

14. Civil litigation has been slightly less than in 1912-13, though the volume of work in the Chief Court shows no tendency to diminish. The decrease has been almost entirely in suits for money or moveable property, and the fall in the number of such suits in certain districts where co-operation flourishes is remarkable and seems to indicate that the existence of these societies is the cause. Another point of interest is that suits brought by money-lenders and shop-keepers against agriculturists have dwindled from over 100,000 in 1912 to 68,500 in the present year; this is a healthy symptom and a practical vindication of the policy of the Land Alienation Act.

A special feature of the administration of the Punjab has always been the inter-connection between the departments of Government, Assistant Commissioners, for instance, always receiving a training in civil work, even though they may be destined for executive work; as a corollary a scheme is now being brought into operation for the training of Munsifs in the details of revenue work.

The Pre-emption Act of 1913 and the Insolvency Act are not working successfully; in regard to the first, it has not yet been sufficiently long on its trial to justify any steps for its alteration, but in regard to the second, a special report about the abuses in its working is being submitted to Government.

**Registration.**

15. The prosperous state of the Province is well reflected in the registration returns which, not only in the decrease in the number of optional registrations of sales of immoveable property under Rs. 100 in value, but also in the average price paid in more important transactions dealing with both urban and agricultural land, show the rise in the value of the land; this average price per transaction in the case of agricultural land stands at Rs. 955 in the present as compared with Rs. 805 in the previous triennium.

The number of registrations of sales and mortgages has not varied much in the last three years, except in the case mentioned above, but a steady rise in the number of leases of immoveable property (perpetual leases having risen during the triennium from 387 to 602) is being investigated, as it is suspected that alienations which are really mortgages are often shown as leases in order to defeat the provisions of the Land Alienation Act.

## LOCAL SELF-GOVERNMENT.

16. In last year's report it was pointed out that the interest of members in the work of district boards must depend largely on the power and influence they can exercise, and that again depends largely on the resources of the boards. This year owing to re-assessments of local rate and to increased subventions from Government there has been again a large increase in income from 64·5 to nearly 79·4 lakhs which is nearly 50 per cent. greater than two years ago. The interest of members has been further stimulated by the development of sub-committees in many districts; by pursuing this policy of decentralization and by placing circles in charge of individual members a valuable educative effect is being produced. This effect has extended to the public also as is, for instance, evinced by increased interest in elections, though this is still far from uniform or consistent. Another step in developing initiative in local bodies is in the policy that grants-in-aid should be general rather than ear-marked. District Boards.

The chief heads of income which benefited by the large subventions from Government were education and civil works, the increases being nearly 4 and 6 lakhs respectively; expenditure kept pace with the receipts and, in the case of education at least, was supplemented by subscriptions raised locally, particularly in the colony districts.

Veterinary dispensaries continued to gain in popularity in the greater part of the Province, though they appear to be making little headway in the northern and south-western districts, and interest in various other works of improvement such as cattle-breeding and arboriculture has been fully maintained. In regard to special enterprises there is little to record except the starting of a demonstration farm by the Sialkot Board and the intention of the Gujranwala and Karnal Boards to found industrial schools.

The year as a whole may be characterised as progressive and encouraging both in the work done and the interest shown.

17. Municipalities have also benefited by increased subventions from Government and by re-adjustments in taxation, their income having risen from 66 to nearly 76½ lakhs, but expenditure has increased by less than 5 lakhs. The small increase under education is disappointing, as it shows that in many cases the educational grants from Government have been simply used to set free for non-educational purposes sums hitherto spent on education. Municipalities.

It is in urban communities that interest in representative Government may be expected to develop, but, though municipal elections seem to be raising a little more interest every year, it is still only in a few of the larger municipalities that marked enthusiasm is shown. The lack of interest often displayed in primary education and in sanitary administration (as distinct from the construction of sanitary works), and the continued prevalence of cumbrous forms of taxation, such as octroi, indicate a considerable room for improvement. There is, however, a tendency for better men to come forward as candidates at elections; the sub-committee system is successful here as in district boards; and it

has been found possible to appoint non-official presidents in a considerable number of committees. Another hopeful sign of the times is the fact that many committees are considering proposals for the reform of taxation. The system of terminal taxation has found some support, as it possesses the advantages of octroi without its disadvantages; such a tax has already been sanctioned for Sargodha, and proposals from three other municipalities are under consideration.

Considerable attention is now being given to urban sanitation. Government recently issued a resolution enjoining the employment of qualified Health Officers and Sanitary Inspectors in the large municipalities, and has instituted a class for training Sanitary Inspectors. A resolution has also been issued dealing with town-planning and the extension and improvement of congested and insanitary areas. Municipalities are, as a rule, prevented by lack of funds from taking up any large scheme of this nature, but it is gratifying to observe that the Amritsar Committee are endeavouring to deal with some more congested parts of the city, while in Gurdaspur land has been taken up for a town-planning experiment.

Though the working of several committees still leaves much to be desired, yet a genuine public spirit is undoubtedly developing, especially in larger towns, where the committees not only do good work within their own spheres of duty but also show a willingness to co-operate with the administration in other matters relating to the well-being of their communities.

## AGRICULTURE, WEATHER AND CROPS.

**Agricultural Department.**

18. The Agricultural Department, which has recently been strengthened by the appointment of two more Deputy Directors and an Agricultural Engineer, has many functions to perform, which may roughly be summarised as investigation, education and popularization; these functions often overlap each other.

Owing to adverse climatic conditions the year was unfavourable for experimental work with regard to wheat, but investigations in connection with the wheat weevil, the cane-borer and other pests were continued.

In education, in the technical sense of the term, there has been little progress and the small influx of students to the Lyallpur College forms a curious contrast to the competition for entrance at the Veterinary College. Measures have been taken, however, to shorten and cheapen the course as far as is consistent with soundness of training. In particular, a six months' vernacular course intended to give practical manual training in the use of improved agricultural implements has been introduced, and this is attended by the sons of genuine agriculturists, the class *par excellence* whose co-operation it is desirable to enlist. It is to be hoped that this course, which has been introduced as a side issue, may ultimately prove to be one of the most practically important branches of the department's operations. Apart from this course, the college may be regarded practically as a training place for members of the Agricultural Department.

The work of popularization is conducted by means of occasional demonstrations of implements at fairs, by leasing land on favourable terms or by granting similar facilities to those who are willing to undertake to experiment with special kinds of seed or implements recommended by the department, and, thirdly, by means of agricultural associations with agricultural assistants to help the members, each of whom is required to carry out some agricultural operation or to use some improved implement in the way recommended by the department. In these ways a great deal is being done; for instance, a lease of 3,000 acres on the Lower Bari Doab Canal has been granted on condition that the lessee grows 400 acres of American cotton every year for seed and also grows other seed for the department, and another lease of 2,000 acres has been given on condition that the lessee cultivates the land by a special kind of steam plough. There are five district agricultural associations, and each consists almost entirely of leading land-owners and so, being to a great extent non-official, these societies are able to serve as interpreters between the department and the people. Many co-operative credit societies have also helped the progress of agriculture in similar ways, as by stocking Meston ploughs or by arranging for members to grow varieties of seed considered specially suitable for the locality concerned. It may be found eventually that these sturdy societies which are the new embodiment of the communal spirit in villages will do better work as missionaries of the aims and objects of the Agricultural Department than can be done by the multiplication of special district societies not particularly connected with village communal life.

In fine, though progress may for long be slow, for there is much to learn as well as much to teach, and though progress cannot be measured in concrete terms by the intervals between annual reports, yet both in the work done and in the active interest aroused in recent years, there is much cause for optimistic reflection on the future of the department.

19. No better proof that the Veterinary Department is winning the confidence of the people could be forthcoming than the fact that many private individuals have come forward to establish Veterinary hospitals. Wherever such hospitals are made and properly equipped by local bodies or private individuals, an addition to the staff of Veterinary Assistants is sanctioned and the cost met by Government. The growing popularity of the department and of its work is seen, on the one hand, by the steady stream of pupils to the Veterinary College which has necessitated the new buildings now under construction and has created a demand for a second college in Northern India, and, on the other hand, by the largely increased number of animals treated by the veterinary staff on their tours. These tours also serve another purpose, in that they are the best method by which the potentialities of the department are demonstrated to the people. Direct demonstrations and lectures have also been resorted to in villages with considerable effect. Veterinary Department.

The Hissar Cattle Farm has suffered from a partial failure of the rains for the third year in succession, which means not only increased expenditure on the keeping of animals but also risk to stock. The

number of bulls issued (637) is, however, the highest on record, difficulty having been experienced in meeting the large demand.

Co-operative Credit Societies.

20. The year has been a critical one on account of the financial crisis, and the Registrar has consequently devoted most of his energies to the strengthening and consolidating of the existing societies rather than to expansion. As a result, the number of new societies was less than in either of the two preceding years, but the number of members increased by 27,000 and now stands at 161,000, and the total working capital for the 3,333 societies stands at 184¼ lakhs, which is 76 lakhs greater than last year.

The working capital of the Central Societies has increased by about 16 lakhs, of which amount the central banks contribute some 11 lakhs. Practically all the central banks are doing well and, on the whole, repayments of loans by societies are satisfactory.

The drop in the amount of deposits and increased withdrawals are the most marked features of the working of the agricultural societies, but it is satisfactory to learn that the panic which led to the closure of many Indian banks, and even to a serious run on the Post Office Savings Bank, had comparatively slight effect on these rural societies.

There are now 3,261 village societies spread over 25 districts; in each society the average number of members is 47, and there is an average sum of Rs. 85 available for loans to each member as against Rs. 75 in the previous year. A new rule has now been passed for defaulters under which the Registrar has power to decide disputes himself, or by appointment of an umpire, in cases where a man refuses to pay; the decision is treated as the decree of a Civil Court.

There can be no doubt as to the improvement effected in agricultural credit by means of agricultural societies, and it has been noticed that there has already been a substantial decline in the rate of interest demanded by money-lenders from agriculturists even in villages where societies do not actually exist. Among their miscellaneous activities it may be mentioned that these societies are becoming awakened to the necessity of more school education for their children; they also continue to exercise a powerful check against extravagant expenditure on marriage ceremonies and the like. Their action in the matter of reduction of litigation and in the propagation of scientific agriculture has already been noticed, and in many other ways they conduce to the advantage of the members. It is estimated that the amount of indebtedness already cleared off by means of co-operative societies exceeds one crore; and there are indications that the money-lending classes are beginning not only to realise the futility of opposing the movement, but also to invest a part of their capital in it.

Harvests of the year.

21. The total sown area was 1 per cent. less than in the previous year and 3 per cent. less than the estimated normal, but, owing to more favourable conditions, the total matured area was 1 per cent. better than in 1912-13, and only 2 per cent. below the estimated normal.

Prices.

22. Prices, on the whole, were high, but those of cotton and sugarcane fell considerably as compared with the rates in 1912-13.

## FORESTS.

23. The total reduction in forest area during the quinquennium from 1909—1914 amounts to 700 square miles, of which 635 were unclassed forests. The decrease—which represents 8 per cent. of the total forest area—is due mainly to colonization operations and also to the striking-off of an area of 244 square miles of guzara forests in the Rawalpindi Division. During the present year disforestation in the Multan and Montgomery Districts for colonization purposes has caused a further reduction of the area under the control of the Forest Department by 401·73 square miles. This reduction will to some extent be counterbalanced by the formation of irrigated plantations in the colony area for the supply, primarily, of fuel.

The question of the preservation of the forests in Kangra has been occupying the earnest attention of Government. The grazing tax, recently sanctioned under the Land Revenue Act, has been represented as uneven in its distribution and as pressing unfairly on the owners of buffaloes, and the rates are accordingly being revised. The tax has, as might be expected, aroused a great deal of local opposition, and numerous petitions have been received for its abolition. Government has no desire to increase its revenue by this tax, its object being the conservation, in the interests of future generations, of the forests which are threatened with extinction by the over-exploitation of the present generation. It is essential that something should be done to preserve the forests from the evils of excessive grazing and browsing, and hitherto no method has suggested itself except to tax the flocks and herds and so induce the owners to reduce the numbers.

There has been a marked increase in the total number of forest offences, which have risen from 9,956 in 1908-09 to 11,591 in 1913-14. The increase has occurred under unauthorised fellings and illicit grazing, mainly in the Rawalpindi and Kangra Divisions, and is partly due to greater vigilance and activity on the part of the establishment. By far the larger number of these cases are compounded, only 908 new cases having been taken into court during the year.

The results of the sylvicultural operations were unsatisfactory; the year, owing to the early cessation of the monsoon, was an unfavourable one for generation generally, and reproduction, both natural and artificial, suffered in consequence.

In order to cope with the destructive effect of the Chos in the Siwaliks, large reboisement operations are being undertaken in that area and a Forest Officer, with a special establishment, has been deputed for their supervision. The results achieved by the measures taken within the last ten years to arrest further denudation and restore the land damaged by the Chos have been most encouraging. The department continues to show great activity in carrying out sylvicultural experiments, but few definite results have been obtained at present. Among the most important of these are the departmental firing experiments which have met with considerable success and are being extended. Favourable reports have been received on the eucalyptus sowings in the Simla Hills.

During the quinquennium there has been a slight increase in the amount of timber extracted from the forests, whilst the extractions for fire-wood have fallen considerably, the decrease being due to the large reduction of the area under unclassed forests on account of colonization.

The financial working of the forests during the quinquennium has been satisfactory. The revenue has risen from Rs. 9,75,486 to Rs. 13,57,527, and the surplus now amounts to Rs. 4,31,779 as compared with Rs. 2,97,153 in 1908-09.

## TRADE AND MANUFACTURES.

Industries.

24. The output of coal was 51,000 tons as compared with over 38,000 last year. The output from the salt mines also increased by nearly 4 per cent. and amounted to about 39 lakhs of maunds.

The number of factories rose slightly. During the year a whole-time Inspector of Factories took up his duties, and District Magistrates, though remaining *ex-officio* Inspectors, will not now be required to make periodical inspections, while Civil Surgeons will in most districts be responsible only for the certification of children in the factories of their districts. It is hoped, as the result of the expert supervision of the new Inspector, that a considerable improvement will soon be effected in the working of the Punjab factories, which have hitherto been inclined to disregard many of the provisions of the Indian Factories Act.

Internal Trade.

25. The total imports from other Provinces by rail and by river into the Province amounted to over 601½ lakhs of maunds in weight and the approximate value was nearly 3,159 lakhs of rupees. The exports from the Province amounted to nearly 621 lakhs of maunds in weight and 3,411½ lakhs of rupees in value. These figures all show a decrease on the previous year, except the value of exports, which has increased by 209 lakhs.

The noteworthy features of the trade of the year are the bumper cotton crop, the banking crisis, the decline in the export of wheat, gram and barley to Europe, and the famine in the United Provinces, which led to largely increased exports of barley, gram, jowar, bajra and grass to those Provinces. The famine in the United Provinces helped to minimise what would otherwise have been a serious decline of grain exports from the Punjab.

The most notable increase in imports was in foreign piece-goods caused by large imports of European cotton piece-goods in 1913 into India, the subsequent fall in prices having led to increased exports into the Punjab. Other large increases were in marble, stone and metals owing to the requirements of Imperial Delhi and to the construction of bridges over the Sutlej, Beas and Ravi, and in cotton seed owing to the scarcity of fodder in the south-east dry area during the last four months of the year under review.

The decrease in imports of coal and coke was remarkable, and was due to a rise in prices, shortage of waggons and the closing of a number of factories owing to the bank failures. There were also large decreases in the import of sugar and of gunny bags, this last being due to the decrease of wheat exports.

26. The total imports from Central Asia registered at Leh during the year under report amounted to 14,000 maunds in weight and 11 lakhs of rupees in value, and the exports to 12,000 maunds in weight and 17 lakhs of rupees in value. Comparison with the figures of previous years is useless owing to a change in registration, the figures being now supplied by the Assistant Resident at Leh and including for the first time the trade *viá* Kashmir, which passes by the Rawalpindi route. Trade with Ladakh, which is internal trade, is no longer included in the statements. **External Trade.**

As compared with 1912-13 the total imports in 1913-14 from Afghanistan increased in weight by 5 per cent., but declined in value by 13 per cent; exports increased in weight by 39 per cent., but fell off in value by no less than 53 per cent. The export from Afghanistan of hides and raw wool is reported to have been prohibited by His Majesty the Amir for the benefit of factories recently established in his territories. The chief decreases in exports to Afghanistan were in European and Indian piece-goods, manufactured leather, raw sugar and iron. These goods are, however, said to be exported from the Punjab into Afghanistan *viá* Quetta and Chaman, and this trade is not included in the Punjab returns. Exports of rice and green tea more than doubled, the increase in the former case being due to a good crop in the Punjab.

Imports from Chinese Tibet were 7 per cent. less in weight than in 1912-13, but increased in value by 16 per cent. The chief articles of import are wool, salt and borax, of which by far the most important is wool. Excluding treasure, exports, which, owing to transport difficulties, are insignificant, increased by 9 per cent. in weight, but declined in value by 35 per cent.

27. The salient feature of the year under review is the financial crisis in the Punjab, 3 large banks having suspended payment and gone into liquidation, and in consequence several other companies having failed. The strain was felt over the whole of the Province, and many companies, which did not actually collapse, had to restrict their operations very considerably. Of the new companies registered in 1913-14, 11 were banks and 7 trading companies, but 10 of these were unable to weather the financial storm. The number of registered companies shown as working on March 31st, 1914, was 146 as against 155 in 1913. Twenty-two new companies were registered and 31 reported as having ceased working, though 38 more companies actually came to an end, these last not being included in this year's statistics for one or other technical reason. Of the companies which failed, 21 were banks. **Joint Stock Companies.**

## PUBLIC WORKS.

28. The prosperous state of the Provincial finances during the past year is clearly reflected in the report on the working of the Public Works Department, which is the chief spending department of the administration. The Punjab is now after many years in a position to meet the pressing demand for more and better Government buildings, and

for improvement in communications incidental to a rapidly progressing Province. The expenditure in the Buildings and Roads Branch of the department amounted during the year 1913-14 to Rs. 91,60,282, the highest figure yet attained. In the two previous years the expenditure stood at Rs. 70,21,581 in 1911-12 and Rs. 79,70,169 in 1912-13. Most of the increase has been under the head of Civil Buildings, but there have also been increases under all heads of Provincial works. At the same time the establishment charges have remained practically constant for the last eight years. The result has been that the proportion of the cost of establishment to that of works has been reduced from 30·95 in 1909-10 to 13·27 in 1913-14. Many buildings have been erected for the Police and Educational Departments during the year, and a considerable advance has been made in improving the main line of road communications in the Province, which last is partly due to the stimulus provided by the increased motor traffic. A new bridge is in course of construction over the Ravi at Lahore, and the old railway bridges over the Beas and Sutlej have been converted into road bridges.

The chief imperial work completed during the year was the Imperial Legislative Council Chamber at Simla which forms an extended wing of Viceregal Lodge and has cost more than 4 lakhs of rupees.

Among the Provincial works completed during the year may be mentioned the Simla hydro-electric scheme, which serves the dual purpose of supplying light and energy to Simla and also of supplying energy to pump water in order to augment the present supply. The Dane Dam at Nammal in the Mianwali District is the first large masonry dam constructed by the Punjab Public Works Department and is a new feature in irrigation; it has been built on a rocky gorge of a stream and will irrigate an area of about 18,000 acres. Another interesting work now under construction is the grain elevator at Lyallpur, which is the first attempt made at handling and storing grain by modern methods on a large scale in the Punjab.

## IRRIGATION.

29. The direct receipts and expenditure of the Irrigation Department during the year were Rs. 2,56,62,835 and Rs. 1,96,78,459 respectively as against Rs. 2,28,97,431 and Rs. 2,29,78,853, the average of the previous triennium. The expenditure was practically divided evenly between Capital and Working expenses. On the canals in operation classed as Productive Major Works, the profit on the year's working after deducting interest charges was 205 lakhs as compared with 187 lakhs in 1912-13, and the percentage of this to the capital outlay is 12·22 as compared with 11·48. The total area irrigated by these canals was 7,351,721 acres, which is greater than in the previous year. The Upper Chenab and Lower Bari Doab Canals were the only two which ran at a loss. The former of these cannot be worked to full advantage until the completion of the Upper Jhelum Canal, but the area irrigated since the canal opened in 1912 is well in excess of the forecast. The latter was only opened during the year and could not be expected to run at a profit.

The opening of the Upper Jhelum Canal has been postponed owing to extensive flooding caused by the river bund breaching, but otherwise satisfactory progress has been made and the excavation of the main line has been completed.

## RAILWAYS.

30. On the North-Western Railway the open mileage is now 5,178 miles and 273 miles are under construction or sanctioned for construction. The total capital outlay up to 1913-14 amounts to 9,06,563 thousands of rupees, and the net earnings were approximately 4¼ crores, the percentage of net earnings on total capital outlay being 4·68; on the Commercial Section of the line the above percentage was 5·88 and on the Military Section was 0·02.

During the year the Jullundur-Hoshiarpur Branch was opened throughout its length. It traverses a rich part of the Punjab and should pay well.

## REVENUE AND EXPENDITURE.

31. The revenue raised in the Province amounted to Rs. 8,71,14,000 which is somewhat less than in the previous year, this being due to large sums under the head of Sales of Government estates and waste lands having been included in the land revenue figures for the financial year 1912-13 on account of sales of land in the canal colonies. The only other important variation in income is a large increase of 20½ lakhs from irrigation. **General.**

The total expenditure for the year was Rs. 5,87,60,000 or about 37 lakhs greater than in 1912-13, the main causes of which have been increased expenditure on "Education" and "Civil Works" by over 10 and 30 lakhs respectively, the latter figure being increased, however, partly owing to grants for sanitary works made to local bodies having been debited to it instead of to "Medical," the expenditure under which head shows a corresponding decrease of about 12 lakhs.

32. The principal event in the excise administration of the year has been the passing of the new Punjab Excise Act which came into effect on the 1st February 1914. This Act will greatly strengthen the hands of the excise authorities, especially by means of the enhanced penalties which it provides for various offences. The effect of the Act could hardly be apparent in the year under review; but the more stringent provisions of the new law should lead to a material reduction in drunkenness and in illicit distillation. After making allowances for the exclusion of the Delhi figures, etc., the real increase of revenue in the year under review may be taken at about Rs. 4,91,000. This increase has occurred mainly in the receipts from country spirits both in still-head duty, and in vend fees and from sales of excise opium, this last being the result of the rise of issue price from Rs. 18 to Rs. 20 per seer from the 1st April 1913. **Excise.**

The policy of reducing the number of retail licenses for the sale of country spirits has been steadily pursued, and the total of such licenses

fell from 783 to 766 during the year. It appears, however, that a point has now been reached where a further decrease of shops merely sends the trade to the remaining shops or to the illicit still. This view is borne out by the fact that the present reduction of shops has been accompanied by an increased consumption of about 13,000 gallons of country spirit, though the amount of this spirit consumed in the Province is not excessive as compared with the rest of India.

The total consumption of opium is practically stationary, that of charas has decreased, that of bhang is, if anything, on the increase and it is feared that the cocaine habit is advancing in some parts of the province. An illicit trade in cocaine is known to exist, but the small bulk of the drug and the absence of any characteristic odour render detection specially difficult.

Income-tax.

33. The net collections of income-tax rose from Rs. 15,78,000 to Rs. 17,00,000 in the year under report. All heads contributed to the increase, but it was most marked in the case of the receipts under Part IV, where the enhancement was in some part due to the appointment of special officers to revise the assessment in some of the larger towns. The work in these towns is often of too intricate a nature to be performed satisfactorily by the local staff.

One of the obstacles which confront the income tax officer was removed during the year by the issue of instructions to the North-Western Railway to disclose the amounts paid to their contractors. But the difficulties in the way of accurate assessment are still great, and the proportion of cases in which assessees objected successfully to the demands originally made on them rose from 12 per cent. to 13 per cent. Objections were lodged by over one-third of the assessees.

## VITAL STATISTICS.

Public health.

34. The year 1913 was a healthy one, the birth rate being 45·4 *per mille* which is the highest since 1900 and the death rate 30·2 *per mille* which is only slightly in excess of the exceptionally healthy year which preceded it. Infant mortality continues very high, 23 of every 100 children born dying before they are one year old. This is due partly to midwives being unacquainted with simple principles of hygiene and partly to the ignorance of the mothers; efforts are being made to ensure the training of the former, but in the latter case development must come from within rather than from without and so must await the enlightenment of the public generally and the education of the mothers themselves.

The general death rate in towns calculated over many years shows a small relative improvement as compared with that in the country; this tends to show that sanitary improvements in urban areas are beginning to have an appreciable effect.

During the year there were severe epidemics of cholera and small-pox. The former disease was reported from 24 districts, but was very localized in intensity and, notwithstanding a considerable amount of apathy on the part of the people, particularly in towns, the epidemic

was kept in check and only spread to 590 villages and 46 towns out of a total of over 33,000 villages and 128 towns. Much harm was done through failure to give timely information in many cases; whereas, on the other hand, the adoption of simple and speedy measures in some villages averted an outbreak. The small-pox epidemic was a legacy from 1912 and the number of deaths was 38,687, a larger figure than has occurred since 1896. Though the death rate from this cause to some extent varied inversely with the extent of vaccination, yet neither the municipal authorities nor the people are fully alive to the advantages of vaccination and year by year lives are lost through this failure to appreciate a palpable fact.

Plague, which has been such a scourge in recent years, also appeared in 1913, but the visitation was comparatively mild, the number of deaths in British districts being only 17,904 as compared with an annual average mortality of 180,000 since 1904. Thirty-nine medical officers continued to be employed on plague duty, their services being also utilised for giving general medical aid, which policy is not only of intrinsic advantage, but also brings them into touch with the people.

The striking and appalling visitations of plague bring it into high relief before the public eye, but the steady ravages of malarial fever, not only in the number of lives claimed, but also in the number of lives spoiled, are held by experts to be even more serious. This disease affects all races and every social grade; it is one of the chief causes of infant mortality, and its influence on the birth rate is only less marked than on the death rate. These facts afford more than ample justification for the temporary creation of the Punjab Malaria Bureau whose first annual report has been issued this year. The actual deaths from fever in 1913 were 331,698, which is greater than in either of the two previous years, but the average annual mortality since the epidemic of 1908 has been less than in any quinquennium in the last 30 years—a fact which is of interest in view of the common impression that canal irrigation has increased this disease.

This year statistics have been submitted from the leper asylums which are practically all managed by missionary societies. These institutions do invaluable work not only for their patients but also, owing to the consequent *segregation* of lepers, in diminishing the prevalence of this loathsome disease. The number of lepers in the Province at the time of the 1881 census was 9,390, but it has steadily decreased and in 1911 was only 3,091. If present conditions continue, there should be very few lepers in the Punjab in 30 years time.

35. The new life which is being infused into municipalities by generous grants from Government is shown by increased activity in promoting sanitary works which can almost be said to be increasing in geometrical progression, but this activity is apt to exhaust itself in the construction of works and tends to diminish decidedly in matters of administration. The Government resolution already referred to in regard to the employment of Health Officers or properly qualified Sanitary Inspectors should provide a stimulus in this respect. **Sanitation.**

Rural sanitation has begun to attract more public attention, but the non-success of the system of rewards for cleanliness in villages shows how little interest is taken so far by the rural population in this subject and legislation and administration cannot proceed too far in advance of the times. The Punjab Sanitary Conference, which met in August 1913, made valuable recommendations, many of which dealt with rural sanitation. As an educative measure it has been proposed to select some prominent villages, where there is much traffic, to improve their sanitation and thus to give practical demonstrations to all who pass of the advantages accruing from cleanliness.

The demands on the Sanitary Department have increased and a second Deputy Sanitary Commissioner has been appointed. A six months' course of training, including much practical work, has been arranged to meet the coming demand for qualified Sanitary Inspectors.

## MEDICAL RELIEF.

Hospitals.

36. Few departments of Government are appreciated as much as that for medical relief, especially by surgery. This year 19 dispensaries have been opened and 7 closed, leaving a total of 466, and, *in addition*, 28 canal dispensaries are now open to the public. This gives an average of about 18 dispensaries to each district, and in some tracts, where it has not yet been found feasible to build dispensaries, there are itinerant Sub-Assistant Surgeons, and the staff on plague duty also do general medical work wherever they may be, having treated 84,500 patients in the year. Supreme testimony to the surgical work of the medical staff is afforded by the figures of cataract operations which in the triennium ending 1910 amounted to 29,332, and in the triennium now ended number about 41,900; but practically all forms of operations show an increase. The number of patients for medical treatment has also increased.

Contributions from Government towards medical institutions have increased annually and those from district boards also show a steady improvement, though the normal income from subscriptions is still very meagre.

The ever-increasing demand for trained female medical practitioners, nurses and compounders is receiving attention and the Northern India School of Medicine has been recognized as the Provincial medical school for women.

## EDUCATION.

General.

37. In a progressive country where the percentage of school attendance to the estimated total population of school-going age, though steadily improving, still stands at only 22·79 for boys and 4·76 for girls, it follows that each year an advance in the number of educational institutions and in the number of pupils has to be recorded. This year the rate of progress has been well maintained, the number of educational institutions having increased by more than 600 and attendance by nearly 4,000, while expenditure rose by 9 lakhs to 93 lakhs, of which more than 50 lakhs were contributed by Government. Attendance is nearly double now what it was ten years ago, and the annual expenditure is 138 per cent. greater. That this activity, though greatly stimulated by generous Government help, is also shared by the people of the Province,

is shown, for instance, by the fact that 7 new high schools were opened by denominational bodies during the year, while in primary education district boards found it possible to raise their grants-in-aid to privately managed schools from 64½ to 89½ thousand rupees, whereas ten years ago the sum thus expended was only 28½ thousand. All communities have begun to open elementary schools, and local bodies are rarely slow to subsidize them, though municipalities have not shown so much energy in this respect as district boards.

Primary Education.

38. The figures showing the large increase are given in the body of the report. The great expansion has not caused any loss of efficiency, the proportion of trained to untrained teachers having risen and the ratio of pupils to teachers stands at 32·1 as compared with 36·1 in the last quinquennium. The growing interest of agriculturists in primary education is evinced, not only by the many instances, particularly in the colonies, in which they have come forward with offers of contributions and buildings for new schools, but also in the satisfactory addition to the number of agriculturists' children at school. To encourage this tendency and at the same time to meet the criticism that education spoils a ploughman, a new curriculum for primary schools has been issued. Its distinctive features are a combination of literary training with practical instruction in certain subjects, and endeavours are being made to shorten hours so as to give boys time to help their parents in the fields.

Secondary Schools.

39. The increase in the secondary schools has been very marked, 36 having been added during the year. The activity shown by the Sikh community in this respect has been noticeable in recent years and a similar movement by Muhammadans is now on foot. This rapid increase is not free from danger unless means can be adopted to ensure that the education imparted in them is thorough and useful. The reality of these dangers has been brought home by the unsatisfactory tendencies in the matter of conduct and discipline which manifested themselves in some institutions.

Collegiate Education.

40. The number of Arts Colleges affiliated to the Punjab University has increased from 9 to 10 through a college class having been opened in the Kinnaird High School for Girls in Lahore. During the year a course of lectures was delivered by University lecturers from England, and this proved a most successful innovation and is being repeated. The year, as a whole, was normal except for the unfortunate incident of a strike at the Medical College, the measures taken in regard to which have already been published.

Technical Education.

41. Among professional and technical institutions the most noticeable features are the great demand for admission into the Veterinary College and the difficulty experienced in inducing recruits to join the Agricultural College at Lyallpur. The number of industrial schools in the Province increased from 18 with 1,767 pupils to 24 with 2,249 pupils and some ordinary schools have industrial classes attached.

Education of Special Classes.

42. The increase of pupils in girls' schools as compared with last year is over 14 per cent. and the demand for higher education is growing, there having been six students at the new collegiate classes of the Kinnaird

High School, 21 having appeared in the Matriculation Examination and 214 as against 162 in the Middle School Examination. The great need being for good teachers, it is pleasant to note that the number of students in the Normal School for Women at Lahore rose from 35 to 64.

Great keenness is being shown by the Muhammadan community in the cause of education, and Government is encouraging their efforts to come abreast of the sister communities, especially in regard to higher education. In pursuance of this policy the Government of India have recently sanctioned a recurring grant of Rs. 30,000 for the Islamia College, Lahore. In primary education the Muhammadan community holds its own; development in secondary and collegiate education is far slower, but the enthusiasm now displayed, supported by substantial help from Government, cannot fail to yield excellent results.

**Literature and the Press,**

43. No book of very striking merit was published during the year. One of the notable features of the output is the absence of political and especially of seditious literature which has become almost extinct in the Punjab as a result of the Press Act; philosophy also seems to be in disfavour.

The newspapers and periodicals had plenty of exciting topics to discuss in the Balkan wars, the South African immigration question, relations between Hindus and Muhammadans, etc., but, though comments were frequently strong, action under the Press Act had seldom to be taken. In the majority of presses security was not demanded and, when demanded, ranged from Rs. 500 to Rs. 2,000. In the case of three presses only was the security deposited on declaration declared forfeited, and demands for security resulted in the closing down of two existing presses and prevented the opening of eleven new ones. Warnings were administered to the publishers of eight newspapers in connection with articles calculated to excite disaffection or to engender feelings of class hatred.

## CHAPTER I.

# PHYSICAL AND POLITICAL GEOGRAPHY.

### 1.—Physical Features of the Country, Area, Climate and Chief Staples.

(See pages 1—16 of the report for the year 1911-12.)

### 2.—Historical Summary.

(See pages 16—30 of the report for the year 1911-12.)

### 3.—Form of Administration.

(See pages 30—48 of the report for the year 1911-12.)

### 4.—Character of Land Tenures and System of Survey and Settlements.

(See pages 48—58 of the report for the year 1911-12 and the Punjab Settlement Manual.)

### 5.—Civil Divisions of British Territory.

(See pages 59—62 of the report for the year 1911-12.)

### 6.—Details of the last Census—Tribes and Language.

(See pages 62—71 of the report for the year 1911-12.)

### 7.—Changes in the Administration.

**Personnel.**

1. Sir Louis Dane, G.C.I.E., C.S.I., D.C.L., held charge of the office of Lieutenant-Governor of the Punjab till the 26th May 1913, when he retired from the service and was succeeded by Sir Michael O'Dwyer, K.C.S.I.

**General.**

2. The scheme for the reorganisation of the higher branch of the judiciary of the Province was sanctioned during the year. Legal effect was given to the changes involved by the passing of the Punjab Courts *Act*, III of 1914, and the new arrangements of the superior courts came into force from the 1st August 1914. By these changes the court of the District Judge as hitherto known to the Province disappeared, and the position of District and Sessions Judges was assimilated to that occupied by these Judges in the older "Regulation" Provinces. The superior judicial posts in the Punjab now comprise 22 District and Sessions Judges, and one Judge of the Small Cause Court at Simla. Of these 23 posts six are "*listed*" as open to members of the Provincial Civil Service.

Simultaneously with the new grading of the District and Sessions Judges was introduced a re-grading of the superior Executive Branch of the service. The number of Deputy Commissioners was increased from 33 to 42 by the inclusion in the regular cadre of nine special posts (six Settlement Officers, the two Secretaries to the Financial Commissioners, and the Registrar, Co-operative Credit Societies), which had hitherto been held by "seconded" officers. Of these executive posts five are "listed". A great improvement in the grading of Deputy Commissioners, by placing 14 in each grade, was at the same time introduced.

A temporary appointment of Assistant to the Registrar, Joint Stock Companies and Co-operative Credit Societies, to cope with the growing amount of work dealt with by the Registrar was created at the end of the year.

## 8.—Relations with Tributary States and Frontier Affairs.

3. The most important facts in the political administration of the year were the withdrawal of Bahawalpur State from the control of the Political Agent to the Phulkian States, and the constitution of a new Political Agency for the Baháwalpur, Máler Kotla and Farídkot States.

Lieutenant-Colonel B. E. M. Gurdon, C.I.E., D.S.O., of the Foreign and Political Department, whose services were lent to the Punjab Government by the Government of India, was appointed to the Phulkian States Agency on the 22nd November 1913. Major A. C. Elliott on the same date assumed charge of the Baháwalpur Agency.

The following brief notes are inserted concerning special events of importance in the history of the States during the year :—

### I.—PHULKIAN STATES.

#### PATIALA.

Area, 5,412 square miles; population, 1,407,659; approximate revenue, Rs. 90 lakhs; army and police, 5,310; Chief, Sir Bhupendra Singh, G.C.I.E., Sidhu Jat, aged 23; has a male heir; title, Maharaja; salute, 17 guns.

Personal. 4. His Highness the Maharaja enjoyed excellent health throughout the year. Sir Michael and Lady O'Dwyer paid a short private visit to Chail in September. His Highness attended at Lahore on the occasion of the Lieutenant-Governor's State entry in November and formal visits were exchanged. In February 1914 His Honour paid a State visit to Pátiala. In April, and again in November, the Maharaja was out in camp conducting manœuvres of his troops in which he personally took a prominent part. In May 1913 a Darbar was held at Patiála at which the Political Agent presented jewels on behalf of the Punjab Government in connection with the birth of the Tikka Sahib.

Administration. 5. The form of the administration of the State was changed materially towards the end of July when the Prime Minister and Home Minister retired and the administration was taken over by six Secretaries acting under the direct supervision of the Maharaja.

Public health. 6. The Hardinge Hospital at Dharmpur for the treatment of tuberculosis was opened by His Excellency the Viceroy in September 1913. The birth rate in the State was 38·7 and the death rate 25·15 *per mille*. There was no abnormal amount of disease.

Military. 7. The Imperial Service Troops in which His Highness takes a keen personal interest maintained a high level of efficiency. The Rajendra Lancers attended the manœuvres of the Ambala Cavalry Brigade and earned the commendation of the General Officer Commanding.

#### JIND.

Area, 1,259 square miles; population, 271,728; approximate revenue, Rs. 22 lakhs; army and police, 1,731; Chief, Sir Ranbir Singh, K.C.S.I., Sidhu Jat; aged 35; has no male heir; title, Maharaja; salute, 11 guns.

Personal. 8. His Highness the Maharaja paid a visit to the Lieutenant-Governor at Lahore in November 1913, and His Honour visited the State in February 1914. During this visit the Lieutenant-Governor laid the foundation stone of the King-Emperor George Coronation Wing of the Golden Jubilee Hospital at Sangrur.

Agriculture. 9. Damage was caused in several villages of the Sangrur and Dádri Districts by swarms of locusts. Spraying with sanitary fluid on water was tried without success, but trapping in trenches and burning proved efficacious.

Public Works. 10. The construction of the Jínd-Pánipat Railway was commenced during the year. Proposals in connection with the passage of the projected Bikáner-Delhi Railway through the State are receiving the attention of the Darbar. The survey of certain parts of the Dádri Ilaqa with

a view to ascertaining the feasibility of canal irrigation was taken in hand.

11. The Imperial Service Infantry Regiment fully maintained its high reputation. S. Baldev Singh, son of the Chief Minister, was appointed Commandant. Military.

12. Twenty-seven Co-operative Societies were started during the year, bringing the number up to 49. The capital of these societies has risen from 47 to 82 thousand rupees. The movement appears to have had a successful start and has done much to increase the prosperity of the agriculturists. The Ranbir Mills, a new cotton-ginning factory, were opened at Sangrur. Miscellaneous.

### NABHA.

Area, 928 square miles; population, 248,887; approximate revenue, Rs. 17 lakhs; army and police, 1,523; Chief, Ripudaman Singh, Sidhu Jat; aged 31; has no male heir; title, Maharaja; salute, 11 guns.

13. The Maharaja spent most of the hot weather at Dehra Dun and Mussoorie on account of his health. In October 1913, His Highness paid a visit to the Lieutenant-Governor at Simla and again at Lahore in November when all the Punjab Chiefs assembled there. In February 1914 His Honour visited the State and exchanged visits with His Highness. Personal.

14. The administration of the State continued to follow traditional methods. Administration.

## II.—STATES OF THE BAHAWALPUR AGENCY.

### BAHAWALPUR.

Area, 15,000 square miles; population, 780,641; approximate revenue, Rs. 42 lakhs; army and police, 1,900; Chief, Sadiq Muhammad Khan, Abbasi V, Daudputra; aged 9; title, Nawab; salute, 17 guns.

15. The young Nawab arrived in India from England in January to celebrate his birthday, and came to Baháwalpur to receive the Lieutenant-Governor, who was visiting the State. The Nawab subsequently returned to England for another eight or nine months under the charge of the late Political Agent Mr. C. H. Atkins, I.C.S. His Highness' general health and strength have much improved by the change of climate and surroundings. Personal.

16. An agitation was raised against the introduction of an income-tax, especially in Baháwalpur itself, by a section of the Hindu residents. An amicable settlement was however effected by the authorities, and the agitation subsided. The tax brought in a little over Rs. 50,000. Finance.

17. No new irrigation projects were undertaken in the State. The attention of the Darbar has been chiefly occupied by the Perennial Satlej Canal Scheme now under the consideration of Government. The Darbar have had the benefit of the advice of Sir John Benton, late Inspector-General of Irrigation, who came from England for the purpose. Existing canals worked normally, though, owing to the rivers being low, the supply was somewhat below the average. Irrigation.

18. The Camel Corps and the Cart and Baggage Corps are very efficient and earned the commendation of the Inspector-General, Imperial Service Troops. In March 1914 the Darbar offered a detachment from these troops for service in British East Africa, where there was at the time a possibility of active operations. The situation, however, improved and the detachment was not required, but His Majesty's Government expressed their high appreciation of the Darbar's action. Military.

19. In Police matters the relations with the surrounding British Districts and the Native States of Bikaner and Jaisalmer have been very satisfactory. Police Co-operation Rules have markedly helped to diminish border crime. Police.

### Maler Kotla.

Area, 167 square miles; population, 17,144; approximate revenue, Rs. 13 lakhs; army and police, 769; Chief, Muhammad Ahmad Ali, Khan Bahadur, Pathan; aged 33; has a male heir; title, Nawab; salute, 11 guns.

Personal. 20. During the summer months of 1913 His Highness visited Simla and Kasauli, and in February 1914 the Lieutenant-Governor visited the State. The Nawab was present at Lahore on the occasion of the Lieutenant-Governor's public arrival in November 1913.

Administration. 21. The settlement of the State was completed during the year by a lent officer, Khan Sahib Chaudri Muhammad Din, Extra Assistant Commissioner. The Land Revenue Assessment is now Rs. 4,40,773. The public health was good, but the year was not a very favourable one agriculturally. The Nawab takes considerable personal interest in the administration.

Military. 22. The Imperial Service Sappers are a very efficient corps, and impressed the Inspector-General favourably when he visited them.

### Faridkot.

Area, 642 square miles; population, 130,294; approximate revenue, Rs. 10¾ lakhs; army and police, 381; Chief, Brij Inder Singh, Barar Jat; aged 17; title, Raja; salute, 11 guns; no male heir.

Personal. 23. His Highness the Raja is completing his last year's study at the Chiefs' College. He exchanged formal visits with the Lieutenant-Governor at Lahore in November 1913. His health, which at one time gave cause for anxiety, has greatly improved.

Administration. 24. The administration of the State remained during the year in the charge of the Council of Regency under the presidency of Sardar Dayal Singh. But these arrangements were completely changed soon after the end of the year under report.

Public works. 25. The water-works scheme is nearing completion, and in conjunction with it the Darbar is examining a scheme to light the station by electricity.

Military. 26. The Imperial Service Sappers are highly efficient and earned the commendation of the Inspector-General when he visited the State.

## III.—STATES OF THE JULLUNDUR DIVISION.

### Kapurthala.

Area, 630 square miles; population, 268,133; approximate revenue, Rs. 31 lakhs; army and police, 1,357; Chief, Sir Jagatjit Singh, Bahadur, G.C.S.I., Ahluwalia Sikh; aged 41; has a male heir; title, Maharaja; salute 11 guns; tribute, Rs. 1,31,000.

Personal. 27. The State continued to be administered efficiently by His Highness the Maharaja with the able assistance of Mr. L. French, I.C.S. The Maharaja paid a visit to the Lieutenant-Governor at Lahore in November, and this visit was returned by His Honour in March.

General. 28. There is little to record, but many improvements were made during the year to a number of buildings in the State.

### Mandi.

Area, 1,200 square miles; population, 181,110; approximate revenue, Rs. 4,30,000; army and police, 629; Chief, Jogendra Sen, Rajput Mandal; minor; title, Raja; salute, 11 guns; tribute Rs. 1,00,000.

Personal. 29. The young Raja is being educated in the preparatory school attached to the Queen Mary's College, Lahore.

Administration. 30. The State continued to be administered by Mr. A. L. Gordon Walker, I.C.S., as Superintendent and Settlement Officer, with the aid of an advisory council and under the supervision of the Political Agent Settlement work made satisfactory progress.

SUKET.

Area, 420 square miles; population 54,928; approximate revenue, Rs. 2,32,000; army and police, 71; Chief, Bhim Sen, Rajput; aged 29; has no male heir; title, Raja; salute, 11 guns; tribute, Rs. 11,000.

31. The year was devoid of any important events. His Highness the Raja came to Lahore in March to pay a ceremonial visit to the Lieutenant-Governor. General.

## IV.—STATES OF THE AMBALA DIVISION.

SIRMUR (NAHAN).

Area, 1,198 square miles; population, 138,520; approximate revenue, 6 lakhs; army and police, 605; Chief, Amar Prakash, Rajput; aged 25; has male heir; title, Raja; salute, 11 guns.

32. The Raja continued to administer the State efficiently and successfully. Personal.

33. There is nothing special to record except the progress made with the Nahan Water-Works which are now approaching completion. General.

KALSIA.

Area, 168 square miles; population, 55,909; approximate revenue, Rs. 2,42,250; army and police, 154; Chief, Ravi Sher Singh, Jat; age 11; title, Sardar; no male heir.

34. The Sardar attended the Aitchison College during the year and is making satisfactory progress. Personal.

35. The land revenue settlement operations were considerably advanced, one assessment report being submitted to Government. Several public buildings were improved. General.

PATAUDI.

Area, 53 square miles; population, 19,453; approximate revenue, Rs. 1,10,807; army and police, 65; Chief, Muhammad Ibrahim Ali Khan, Bahadur, Pathan; aged 26; has a male heir; title, Nawab.

36. The Nawab Muhammad Muzaffar Ali Khan, Chief of Pataudi, died on the 31st May 1913, and his only son succeeded him, Khan Bahadur Mir Nasar Ali being retained as Diwan. The installation ceremony of the young Nawab was performed by the Commissioner and the Political Agent at Pataudi on the 16th October 1913. Personal.

LOHARU.

Area, 222 square miles; population, 18,597; approximate revenue, Rs. 81,200; army and police, 63; Chief, Sir Amir-ud-din Ahmed Khan, Bahadur, K.C.I.E., Moghal; aged 55; has a male heir; title, Nawab; personal salute, 9 guns.

37. The title of Khan Bahadur was conferred by Government on Sahibzada Aziz-ud-din Ahmad Khan, brother of the Nawab and Nazim of the State. His financial administration of the State continued to be satisfactory.

DUJANA.

Area, 100 square miles; population, 25,485; approximate revenue, Rs. 77,107; army and police, 145; Chief, Muhammad Khurshaid Ali Khan, Bahadur, Pathan; aged 30; has a male heir; title, Nawab; tribute, 50 sowars, on requirement.

38. The Nawab administered the State himself. The Commissioner of Ambala visited the State in March 1914.

## V.—LAHORE DIVISION.

CHAMBA STATE.

Area, 3,216 square miles; population, 135,873; approximate revenue, Rs. 3,89,000; army and police, 419; Chief, Sir Bhure Singh, K.C.S.I., C.I.E., Rajput; has male heir; age 45; title, Raja; salute, 11 guns.

39. His Highness attended the official entry of the Lieutenant-Governor to Lahore in November and formal visits were exchanged. Personal.

40. The administration of the State by the Raja continued to be very efficient. The various institutions were well maintained. Fruit culture engaged the attention of His Highness during the year. Administration.

Forests.

41. The arrangement by which the control of the State forests was restored to the Raja as an experiment for a period of five years came to an end on the 31st March 1913, but had been so successful that the Government of India sanctioned the permanent restoration of control to His Highness subject to the conditions laid down at the time of the experimental transfer in 1907-08.

## VI.—SIMLA HILL STATES.

42. The chief particulars of the Simla Hill States are given in the following table:—

| No. | State. | Area in square miles including feudatories. | Population in 1911. | Revenue. | Tribute. | Name of Chief. | Race. | Age. | Title. | Whether male heir or not. | Military forces and police. | REMARKS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Rs. | Rs. | | | | | | | |
| 1 | Bilaspur ... | 448 | 93,107 | 3,33,425 | 8,000 | Bijai Chand, C.S.I.... | Rajput ... | 41 | Raja ... | Yes | 198 | |
| 2 | Bashahr ... | 3,820 | 88,957 | 1,44,442 | 3,945 | Shamsher Singh ... | Do. ... | 76 | Do. ... | Yes (adopted) | 13 | |
| 3 | Nalagarh ... | 258 | 49,230 | 1,57,460 | 5,000 | Jogindar Singh ... | Do. ... | 44 | Do. ... | No | 88 | |
| 4 | Keonthal ... | 116 | 25,354 | 1,00,971 | ... | Bijai Sen ... | Do. ... | 37 | Do. ... | Yes | 36 | |
| 5 | Baghal ... | 124 | 26,008 | 68,976 | 3,600 | Bikram Singh ... | Do. ... | 21 | Do. ... | Yes | 25 | |
| 6 | Baghat ... | 36 | 8,797 | 50,000 | 132 | Durga Singh ... | Do. ... | 12 | Rana ... | No | 43 | |
| 7 | Jubbal ... | 288 | 23,727 | 1,98,063 | 2,520 | Bhagat Chand ... | Do. ... | 25 | Do. ... | Yes | 19 | |
| 8 | Kumharsain... | 90 | 12,219 | 30,000 | 2,000 | Hira Singh ... ... | Do. ... | 72 | Do. ... | Yes | 7 | |
| 9 | Bhajji ... | 96 | 14,972 | 33,504 | 1,440 | Bir Pal ... ... | Do. ... | 8 | Do. ... | No | 32 | |
| 10 | Mailog ... | 43 | 8,663 | 37,783 | 1,440 | Durga Chand ... | Do. ... | 16 | Thakur ... | No | 16 | |
| 11 | Balsan ... | 51 | 6,225 | 18,500 | 1,080 | Bir Singh ... | Do. ... | 50 | Rana ... | No | ... | |
| 12 | Dhami ... | 26 | 4,484 | 30,000 | 720 | Hira Singh, C.I.E. ... | Do. ... | 37 | Do. ... | Yes | 25 | |
| 13 | Kothar ... | 20 | 4,016 | 17,000 | 1,000 | Jagjit Singh ... | Do. ... | 27 | Do. ... | Yes | 8 | |
| 14 | Kunihar ... | 80 | 2,208 | 6,000 | 180 | Hardeo Singh ... | Do. ... | 16 | Thakur ... | No | 9 | |
| 15 | Mangal ... | 12 | 1,267 | 1,000 | 72 | Tilok Singh... ... | Do. ... | 63 | Rana ... | Yes | ... | |
| 16 | Bija ... | 4 | 1,064 | 8,496 | 124 | Puran Chand ... | Do. ... | 18 | Thakur ... | No | 8 | |
| 17 | Darkuti ... | 8 | 521 | 8,700 | ... | Ram Saran Singh ... | Do. ... | 71 | Rana ... | Yes | ... | |
| 18 | Taroch ... | 67 | 4,493 | 5,000 | 288 | Surat Singh... ... | Do. ... | 27 | Thakur ... | Yes | ... | |
| 19 | Sangri ... | 16 | 3,022 | 2,743 | ... | Hira Singh ... ... | Do. ... | 63 | Rai ... | Yes | ... | |
| 20 | Kaneti ... | 19 | 2,854 | 8,590 | ... | Amog Chand ... | Do. ... | 23 | Thakur ... | No | ... | |
| 21 | Delath ... | 42 | 1,392 | 2.743 | ... | Narindar Singh ... | Do. ... | 64 | Do. ... | Yes | ... | Tributaries of Bashahr. |
| 22 | Koti ... | 50 | 8,265 | 44,154 | ... | Raghbir Chand ... | Do. ... | 54 | Rana ... | Yes | 56 | |
| 23 | Theog ... | 144 | 6,345 | 14,391 | ... | Padam Chand ... | Do. ... | 28 | Thakur ... | Yes | 8 | Tributaries of Keonthal. |
| 24 | Madhan ... | 9 | 3,901 | 5,500 | ... | Randhir Chand ... | Do. ... | 27 | Do. ... | No | 6 | |
| 25 | Ghond ... | 28 | 1,887 | 5,610 | ... | Ranjit Singh ... | Do. ... | 31 | Do. ... | Yes | ... | |
| 26 | Ratesh ... | 12 | 472 | 700 | ... | Hira Singh ... | Do. ... | 46 | Do. ... | Yes | ... | |
| 27 | Rawin ... | 7 | 749 | 3,091 | ... | Kidar Singh ... | Do. ... | 37 | Do. ... | Yes | ... | |
| 28 | Dhadi ... | 25 | 244 | 1,600 | ... | Dharm Singh ... | Do. ... | 26 | Do. ... | Yes | ... | Tributaries of Jubbal. |

*Bilaspur.*—The administration proceeded smoothly.

*Bashahr.*—The new assessment of the Rohru Tahsil was announced and was well received.

*Nalagarh.*—Progress was made in the reduction of the State debt.

*Baghat.*—The general condition of the State is satisfactory. The young Raja is doing very well at the Aitchison College.

*Jubbal.*—The condition of the State continued to be most satisfactory.

*Bhajji.*—The Rana, Durga Singh, died on the 8th May 1913, leaving an heir of seven years of age who has been recognised as Rana. The administration is in the hands of a Council of four members.

*Kumharsain.*—The Tikka Sahib continued to do well.

*Mailog.*—The Thakur and his brother are students at the Aitchison College and received excellent reports from the Principal.

*Kunihar.*—The Tikka has been recently married to the sister of the Thakur of Taroch.

*Taroch.*—The forest management is now satisfactory.

## FRONTIER AFFAIRS.

43. During 1913-14 the Baloch border of Dera Ghazi Khan gave no trouble. Nawab Sir Bahram Khan continued to manage his tribe in an efficient manner and to give valuable assistance to the Administration as an Honorary Magistrate and as the principal member of the District Jirga of Chiefs and of the joint Dera Ghazi Khan-Baluchistan Jirga. On account of the age and infirmity of the Bozdar and Kasrani Tumandars arrangements were made to entrust the practical working of their tribes to Sardar Paind Khan, Bozdar, and Sardar Mahmud Khan, Kasrani. Sardar Jamal Khan, Leghari, remained in tutelage, but exercised powers as a magistrate and was initiated into the working of his tuman. The joint jirga met at Fort Munro in October. The date was fixed to suit the convenience of the Baluchistan authorities who were represented by Mr. Dobbs, Political Agent, Sibi. Satisfactory progress was made with business which included one noticeable case, *viz.*, that of a dacoity at Mamuri, of which the perpetrators were recovered from the Bugti Tuman through the friendly offices of Sardar Ghaus Bakhsh Khan, Mazári, and the Bugti Chief. The number of cases for disposal by jirga in the district, both civil and criminal, increased. Murders, however, amounted to 32 only and only one case was particularly remarkable, *viz.*, one in which two Pathan cattle dealers with two guides lost their lives; this case was untraced. There were two serious cases of dacoity,—one took place at Mithewali on the 8th February 1914 and the other at Mangrotha on February the 20th, 1914. There is believed to have been no connection between the gangs which committed these two raids. The property lost at Mithewali, where two Hindus were killed, was not considerable; the offenders were not traced and the Muhammadan landholders of the village were fined for failure to render assistance against them. The second raid was committed by six Mahsuds assisted by a Kasrani accomplice. The Biluch levy with the Kasrani and Khetran tribesmen as well as the Usteranas turned out and attacked the raiders on their retreat. Five were killed and the sixth has been sentenced to 14 years' rigorous imprisonment. Liberal rewards were given for services rendered in connection with this raid and at the same time the sections of the Kasrani tribe which were believed to have assisted the raiders were punished.

PHYSICAL AND POLITICAL GEOGRAPHY.

## 9.—Condition of the people.

[ For information regarding this section *vide*—

Administration Report for the year 1911-12, paragraph 249.
Moral and Material Progress Report for the years 1901-02 to 1911-12 and chapter VI, below. ]

44. The results of the first regular survey of wages were described in last year's report. During the present year, owing to two good harvests, the prosperity of the agricultural population has been maintained and probably enhanced except in the south-east where both harvests were very poor; even there, however, thanks to the three preceding harvests being good, distress has not been severe. Wages continued to rise nearly everywhere except in the south-east, and the agricultural labourer was thus able to obtain his full share of the prosperity enjoyed by his employer.

The provincial birth rate for the year was 45·4 *per mille* which is 3·1 in excess of the average for the previous five years. The death rate was slightly higher than in the preceding year which was exceptionally healthy. As regards the prices of the valuable revenue-paying crops, the year was not quite so favourable as its predecessor, but, on the whole, prices remained high except in the case of unginned cotton and raw sugar.

## CHAPTER II.

# ADMINISTRATION OF THE LAND.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

*Realization of the Revenue.*— } Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1912 to 30th September 1913.
*Revenue Surveys and Settlements.*— }

*Professional Surveys.*—General Report on the Operations of the Survey of India for the year ending 30th September 1913.

*Land Records.*—Report on the Operations of the Department of Land Records, Punjab, for the year ending 30th September 1913.

*Waste Lands and Government Estates.*—
1. Annual Report for the Chenab, Jhelum and Chuniân Colonies for the year ending 30th September 1913.
2. Land Revenue Report, *as above.*

*Wards' Estates.*—Report on the Administration of Estates under the Court of Wards in the Punjab for the year ending 30th September 1913.

*Revenue and rent-paying classes.*—Land Revenue Report, *as above.*

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Agricultural Statistics of India, Volume I—

Area Totals—Table 1 J.
Classification of Area—Table 2 I.
Incidence of Land Revenue—Table 5 I.
Transfers of Land—Table 6 H.
Changes in Boundaries—Appendix B.

### 10.—Realization of the Revenue.

*FIXED LAND REVENUE.*

**Demand and collections.**

45. The fixed land revenue demand is just under Rs. 2·13 crores. The exclusion of the Delhi Province meant a reduction of about $3\frac{1}{2}$ lakhs. Of the total fixed demand, 97·3 per cent. was collected and the high standard of collection was well maintained in all parts of the Province, except in the three northern districts of Jhelum, Attock and Rawalpindi, where both crops were poor, and in Gujranwala, where the delay was caused by the re-assessment operations. The fact that over 95 per cent. was collected without any difficulty in all the remaining districts, many of which have recently been re-assessed, is a very clear indication that the resources of the zamindars of those tracts are fully capable of meeting the increased demands. It was found necessary to suspend a little over $4\frac{1}{2}$ lakhs altogether, of which the three northern districts already mentioned account for nearly 3 lakhs. Of the outstanding balance of last year amounting to Rs. 7,85,597, Rs. 2,31,324 were recovered.

**Riverain action.**

46. The area removed from assessment owing to diluvion amounted to 28,056 acres compared with 29,648 acres last year. The area newly assessed was 44,291 acres. For the first time for several years provincial revenues have benefited from riverain action. The net increase in the fixed land revenue demand is Rs. 10,069.

FLUCTUATING LAND REVENUE.

**Demand and collections.**

47. Owing partly to recent re-assessments of the colony areas in Gujranwala, Lyallpur and Shahpur, in which the land revenue is almost entirely fluctuating, and partly to favourable river floods, there has been a further large increase in the amount of fluctuating land revenue which

has risen from 87 lakhs to nearly 110 lakhs. No less than 20 lakhs of the increase is due to the re-assessment or rather the first regular assessment of the colony lands. Of the remaining 3 lakhs, it is probable that the increase is partly due to more careful supervision. It is only in Montgomery that the amounts fell seriously short of the Settlement Officer's estimate which was admittedly a high one. In other districts, where fluctuating assessments are a prominent feature of the land revenue administration, such as Mianwali, Multan, and Muzaffargarh, there has been a satisfactory excess over the estimate. This excess is the result of favourable agricultural conditions, and when those conditions become unfavourable in these very precarious tracts, it must be expected that the realizations will be below the estimate. Only $\frac{1}{5}$ per cent. of the fluctuating demand was not collected, a fact which bears testimony to the leniency of the demand and the efficiency of the collecting agency.

### OTHER LAND REVENUE.

Demand and collections.

48. Receipts under this head have fallen from 69 to 51 lakhs, which is due entirely to the contraction of receipts from sale of proprietary rights in the Lower Chenab and Chunián Colonies. Large sums may be expected from the auction sales on the Upper Chenab Canal and the Lower Bari Doab Canal in the future.

### MISCELLANEOUS.

49. There has been a continued decrease in the number of coercive processes issued, whether against lambardars or at their instance, and the cases in which it was found necessary to resort to sale of property or imprisonment were very few in number. The magnitude of operations may be gathered from the fact that though $3\frac{1}{4}$ crores of rupees were collected from some four million proprietary or occupancy holdings, in only 11 cases was resort made to imprisonment of the defaulter, and in 36 to sale of movable property, while in only two cases was it found necessary to sell immovable property. The lambardars continue to avail themselves freely of the permission to pay in land revenue by money-order, and over 18 lakhs was thus paid in, though the total amount so remitted was less than last year's total by $1\frac{1}{2}$ lakhs. On the other hand, the system of remitting the revenue in currency notes is still regarded with some distrust. It has been sanctioned experimentally in a few districts.

The system of requiring the sadr tahsil revenue accountant to attend at the sadr treasury when payments are heaviest, noticed last year as in force in Amritsar and Jhelum, has extended to Hoshiarpur, Multán and Dera Ghāzi Khan, and has proved a convenience. It is now the custom for Settlement Officers in reporting their proposals for the payments of the revenue demand to arrange, by fixing different dates for different villages, that only a manageable amount should fall due on each day of the period of payment. Not only is the work of accounts facilitated by this arrangement, but the Tahsildar and his Naib are also enabled to supervise the work of lambardars conveniently.

## 11.—Professional surveys.

Riverain party.

50. The riverain detachment of the Survey Department continued its work of traversing and laying down base lines during the year. Theodolite stations were fixed, circuits traversed and bases demarcated along the Sutlej, Ravi, Chenab and Jhelum rivers in connection with the Ferozepore, Lahore, Sialkot, Gujrat, and Shahpur Settlements, and plotted sheets were supplied to Settlement Officers. Twelve hundred square miles of circuit were traversed, and the expenditure amounted to Rs. 21,906.

Other work done.

51. The Lower Bari Doab rectangular survey was completed. Nearly 15,000 rectangles of 25 acres each were laid down and over a thousand linear miles were traversed. More than half the work was tested by Naib Tahsildars, Tahsildars and Survey Officers: 16 per cent. was

checked by theodolite traverse. The expenditure during the year amounted to Rs. 70,256. Operations extended over three seasons at a total cost of Rs. 3,18,278, against an estimated expenditure of Rs. 4,63,586. In all 2,883 square miles have been surveyed.

The services of the detachment were also obtained in providing an accurate framework for field measurements in the Khushab Thal and in compiling maps showing village boundaries. The traverse covered 1,967 linear and 1,070 square miles and 3,808 theodolite stations were laid out at a cost of Rs. 17,335.

In order to facilitate measurements in the Dera-Hamirpur Settlement and to gain experience for the future patwari surveys of the remaining tahsils of the Kangra District, an experimental survey was carried out in that district by the detachment on the basis of the previous triangulation by the Survey Department. Points in suitable places in cultivation and along "tika" and village boundaries were picked up and plotted, and mapping sheets for 256 "tikas" were supplied to the Settlement Officer. The experiment proved successful and will be extended to the other tahsils. The triangulation and the traverse of 637 linear and 81 square miles cost Rs. 5,712.

A topographical survey of 388 square miles in the Ludhiana District was made by the Survey Department. The only important alteration in district boundaries was the transfer of 140 villages from the Montgomery to the Lyallpur District.

## 12.—Revenue Surveys and Settlements.

52. Ten settlements were in progress during the year, by the end of which the Kulu and Gujranwala settlements were completed. In the former the cost was 25 per cent. below the estimate, but the Gujranwala settlement has been both more lengthy and more costly than was anticipated. Its cost, however, will be recovered in two years. In Shahpur and the Dera-Hamirpur-Una Tahsils also unforeseen difficulties have delayed progress, and the estimated cost and duration will probably be exceeded. A similar result may be expected in Gujrat and Lahore. Considerable progress was made with re-assessment during the year, and the new assessments were on the whole well received. An exception must perhaps be made in the case of the Rakh Branch of the Lower Chenab Canal where the large increases of revenue in a prosperous and highly developed tract, which was for the first time being assessed on regular lines, gave rise to some excitement. The Lieutenant-Governor, on personal enquiry, found that there were absolutely no grounds for the complaints of general over-assessment, but that in some cases it was advisable to graduate the enhancements, or to impose intermediate rates of assessment, and action has now been taken on these lines under the orders of the Commissioners of Lahore and Multan. That the enhancements were moderate is established by the fact that the value of land has shown no tendency to fall, and though the landlord's margin of profit may have in some cases been reduced by Re. 1 or even Re. 1½ per acre, the rent is still from 3 to 6 times the enhanced land revenue. Cases have come to notice in which landlords have leased their squares for a term of years at a profit of Rs. 600 per square or Rs. 22 per acre, the lessee bearing all charges.

The estimate of increase by re-assessment on the Rakh Branch of the Lower Chenab Colony is 13 lakhs of rupees per annum, the profits having far exceeded those of any other settlement conducted in the Punjab. This is due to the cost being very small, as no measurements were in progress; and the Settlement Office Staff consisted of two Naib Tahsildars and a small office establishment. In Gujránwála an enhancement of two lakhs per annum is expected. In Amritsar the re-assessment has resulted in an enhancement of three lakhs and thirty-seven thousand.

The Settlement Officer, Lahore, took up his appointment in the beginning of the year, and operations in Jullundur and the remaining tahsils of Kángra commenced on 1st October 1913.

ADMINISTRATION OF THE LAND.

## 13.—Land Records.

Patwaris.

53. There has been a reduction of 105 in the total number of patwaris and assistant patwaris, due chiefly to the loss of Delhi Province and also to a smaller extent to re-arrangement of establishment in districts recently settled. There is some hope that the proposal to re-arrange the duties of Revenue and Canal Patwaris in the Canal Colonies may ultimately result in a considerable reduction in the Revenue establishment. The new system was introduced experimentally in 50 villages of the Lyallpur District. It is not so far successful, but its defects appear not to be radical. The experiment is to be continued for a second year in the selected circles.

There has been a further increase in the number of patwaris who belong to agricultural tribes, and an improvement in their educational qualifications. The last decade has seen a progressive improvement in the educational qualifications of patwaris. In 1903-04 only 35 per cent. had passed the Middle School and the Entrance Examinations. The proportion rose every year till it reached 47 in 1911-12 and 1912-13.

Kanungos.

54. The scheme for amalgamating the district and settlement kanungo staff is reported to be working satisfactorily on the whole, though a few minor difficulties have been experienced. The question of investing field kanungos with the power of attesting undisputed mutations is still under consideration. At present powers have been conferred on kanungos employed in settlements only, as they are under very close supervision. Such selected field kanungos attested 16,000 undisputed mutations of inheritance, but the only district in which appreciable relief was afforded to Revenue Officers is Lyallpur where ⅓rd of the total disposals were attested by field kanungos. It is under contemplation to extend the power of attestation to certain specified classes of undisputed mutations other than inheritance; and opinions have been called for as to what these classes should be.

Records.

55. The system of having maps corrected and records revised in districts about to come under settlement before the Settlement Officer enters upon his duties, has been the subject of careful consideration. The results of the experiments in the three districts where it has been tried have not been satisfactory, and the system has now been abandoned. One reason for this is that the system is partly based on the separation of record work from assessment, and thus the Settlement Officer tends to appear chiefly as a tax collector, and to lose that knowledge of local conditions and that influence with people which he gains from overhauling the records, checking the work of patwaris and kanungos, and generally showing that he is working in the interests of the people as much as in those of Government.

## 14.—Waste Lands and Government Estates.

Lower Chenab Colony.

56. Allotment in the Lower Chenab Colony is practically complete, except for the sale of small plots of unoccupied land. The total cultivated area shows a falling off this year by 74,400 acres. The decrease was in the *rabi*. The shortage of water at the time of the *rabi* sowings was due to the early cessation of the monsoon rains, but the decrease may be partly due to the abolition of *kharaba* and the discouragement of gambling on rain which in former years induced the cultivator to sow more crops than he could possibly mature by the aid of canal water, in the hope that they would be matured by rain. In those days the cultivator stood to lose nothing but his seed and labour, while he stood to gain a full crop. Now, however, he has to pay land revenue and canal dues, whether the crop matures or not. The fact that such a comprehensive change of system has been carried through without any expression of discontent is matter for congratulation.

ADMINISTRATION OF THE LAND

Re-assessment.

57. The re-assessment of the Rakh Branch, which has already been noticed, caused some agitation on account of the large increase, but this excitement has now died down. Information has recently been received from an independent source to the effect that a large absentee landlord gets from his land only Re. 1-8-0 an acre less now than he got before the re-assessment was carried out.

Towns and markets.

58. The colony towns and markets have felt the effect of the recent financial crisis in the Punjab especially those in Lyallpur. The towns themselves are gradually becoming fully equipped with modern drainage systems, water-works and public buildings. There are, however, complaints of lack of funds and of want of room for expansion. A new private market in the Sharakpur Tahsil, called Warburton Market, has been started. This is the first instance of a town in the canal colonies entirely controlled by private management. The Nankána Market is another instance of private speculation, and it is said to be rising rapidly into importance.

Co-operation.

59. The spread of the co-operative movement in the colonies is satisfactory and the demand for education is a natural reflex of prosperity and new ambitions.

Service grants.

60. A special effort has been made during the year to impress on the service grantees that they must either fulfil their contracts or lose the consideration on which these are based. In consequence of the orders issued by the Financial Commissioner, the mule-breeding conditions have been enforced with greater strictness.

Lower Jhelum Colony.

61. The prosperity of the Jhelum Colony now seems assured; the Irrigation Department profit on capital outlay which in 1905—08 averaged 4 per cent., rose to 5 per cent. in 1908-11; and in the last year was 20 per cent. The re-assessment was carried out without any great protest and has been loyally accepted. The Co-operative Credit movement is making headway here as in Lyallpur and the success of the Zamindar Trading Company is noticeable; though the company is not registered, the registrar is guiding its activities which have already spread to Karáchi, and may go further still. This Company has four chief offices and 26 branches. Its profit on a year's working was 15 per cent. and it sold grain worth 87 lakhs. The Central Bank at Sargodha has also done well and has now provided a hundred village banks with loans amounting to Rs. 1,30,000.

Horse-breeding conditions.

62. The steady and encouraging progress made in horse-breeding operations from the beginning of the Colony till 1907-08 has not been maintained during the last six years. It appears that the colonists are somewhat lax in fulfilling these conditions, but as a result of a firm but sympathetic policy improvement is being effected.

Chunian Colony.

63. The colonists are generally prospering on account of good crops and the rise in prices. They are also fortunate in not being a prey so far to the evils of drink and litigation, which mar the prosperity of the Manjha Jats in Lahore District. The system of Co-operative Credit Banks is finding favour with the colonists, and in a short time there have been established 21 banks which are working well.

Lower Bari Doab Colony.

64. This colonization scheme had not been sanctioned by the end of the year, but preliminary work is being pushed on energetically and a considerable area has been given out on temporary cultivation. The time of the Colonization Officer has been mainly occupied with this work and the demarcation of the proprietary villages into squares and with the preparation of lists of local claimants to compensatory grants.

## 15.—Wards' estates.

65. During the year the Court of Wards had 50 estates under management; of these, three were released in a prosperous condition. As an illustration Arnauli estate in the Karnal District may be taken. It came under management in 1897. The small debt of Rs. 16,000 has been paid off; the landed property of the estate has increased from

ADMINISTRATION OF THE LAND.

853 to 1,002 acres. Rupees 1,04,000 have been spent on permanent improvements. The value of the house property has risen from Rs. 34,000 to Rs. 85,000 and the total assets of the estate have swelled from Rs. 91,000 to Rs. 2,73,000. Various developments in the larger estates in the way of horse and cattle-breeding, fruit culture, grain markets, etc., are taking place and Kot Fateh Khan estate in the Attock District is prominent in this respect. Among other things this estate has started a Tenants' Co-operative Society, an experiment which is well worth imitation.

## 16.—Revenue and rent-paying classes.

General.

66. The decrease of 325 villages in the province is chiefly due to the exclusion of the Delhi enclave, but the consequent loss of cultivated area is almost counterbalanced by an extension of cultivation elsewhere. The total of land-owners and share-holders has fallen by three thousand, but jamabandi holdings are practically as before, which suggests that sub-division of holdings continues to increase.

Transfers.

67. Reports from all parts of the province show that the market value of land continues to rise steadily even in districts recently re-assessed. Several district officers notice the popularity of the Punjab Redemption of Mortgages Act (II of 1913). Very little opposition has been offered by money-lenders and the Act is reported to be working smoothly.

Loans Act.

68. There was a small diminution in the amount of advances under the Loans Acts which amounted to Rs. 7½ lakhs, as compared with rather more than 8 lakhs last year. There is a steadily increasing tendency among agriculturists to utilize advances from the Co-operative Credit Societies for the purposes to which taqavi loans are generally applied. This has been particularly noticed in Hoshiárpur and Gujránwála, where the demand for Government loans is consequently decreasing.

Land Alienation Act.

69. Members of notified agricultural tribes hold 86 per cent. of the cultivated area. The statistics show that the Act is having its intended effect of confining the interests of non-agricultural tribes in the land to temporary occupation, and the high prices prevailing during this and previous years have enabled the process of re-propriating the cultivating classes in land permanently alienated to go on at an increased rate. Nor is there any evidence that the Act is working only in the interests of large investors who are members of agricultural tribes, and the extent to which alienation is made to members of the same village community is a proof of the general benefit to the cultivating classes.

Rent paying classes.

70. The number of cases of ejectment of occupancy tenants has fallen from 108 to 34, but, on the other hand, the number of cases in which tenants-at-will were ejected, was 6,163 as against 4,404. It is difficult to account for this rise, but it would appear that the demand for tenants in the colonies has not had so far-reaching an effect as was supposed, and that the position of a tenant is not so secure as the ejectment figures of the last three years tended to indicate. In spite of plague and colonization throughout the greater portion of the province landlords are in a strong position, able to select their own tenants, and to choose between and realize in full the customary rates of rent.

### Miscellaneous.

Descent of Jagirs Act.

71. No notifications under the Act were made during the year. The total number of jagirs gazetted remains at 139 with an annual value of nearly 8 lakhs of rupees, out of a total of about 30 lakhs assigned.

Land Preservation. Chos Act.

72. The policy of constructing expensive bunds to restrain chos in their lower reaches, has been abandoned, and work of this nature will be confined to maintaining and repairing a few of the less expensive and more effectual bunds in Hoshiárpur. With this will be combined reclamation operations by the planting of kharkhana grass in suitable localities, but in future the line of main action will be in the direction of reafforesting the western slopes of the Siwaliks.

# CHAPTER III.

# PROTECTION.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

*Police.*—(1) Report on the Police Administration of the Punjab for the year 1913.

(2) Report on the working of the Criminal Tribes Act for the year 1913.

(3) Report of the Chemical Examiner to Government, Punjab, for the year 1913.

*Criminal Justice.*—Report on the Administration of Criminal Justice in the Punjab and its Dependencies during the year 1913.

*Prisons.*—Report on the Administration of the Jails in the Punjab, 1913.

*Civil Justice.*—Report on the Administration of Civil Justice in the Punjab and its Dependencies during the year 1913.

*Registration.*—Note on the Registration Returns of the Punjab for the year 1913.

*Legal Affairs of Government.*—Report on the administration of the legal affairs of the Government of the Punjab for the year 1913.

*Local Boards Administration.*—Report on the Administration and Accounts of the District Boards in the Punjab for the year 1913-14.

*Municipal Administration.*—Report on the working of municipalities in the Punjab during the year 1913-14.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Statistics of British India, Part VI.—Administrative and Judicial.

Part VIII.—Local Funds.

## 17.—Legislating Authority.

73. The following changes took place amongst the Hon'ble Members of the Council :—

1. The Hon'ble Mr. J. P. Thompson was nominated, *vice* the Hon'ble Mr. H. P. Tollinton, resigned.
2. The Hon'ble Colonel R. S. Maclagan was nominated, *vice* the Hon'ble Sir Henry Burt, resigned.
3. The Hon'ble Mr. H. J. Maynard was nominated, *vice* the Hon'ble Sir M. W. Fenton, resigned.
4. The Hon'ble Rai Bahadur Shadi Lal, elected Member for the Punjab University, vacated his seat on his appointment as Judge of the Chief Court, and the Hon'ble Sir P. C. Chatterjee was elected in his place.

## 18.—Course of Legislation.

**Business transacted.**

74. Four meetings of the Legislative Council were held, three in Lahore and one at Simla.

Three Bills were introduced and passed in Council during the year.

On receiving the assent of His Excellency the Viceroy they became law as follows :—

(1) The Punjab Excise Act (I of 1914);

(2) The Punjab Fisheries Act (II of 1914); and

(3) The Punjab Courts Act (III of 1914).

Three hundred and nine questions were put and answered.

Two resolutions were moved, one dealing with rural sanitation and one asking for an increased allotment for sanitation. Both were withdrawn after discussion.

Indian Acts.

75. The Acts of the Imperial Legislative Council, more particularly affecting the province, passed during the year are :—

(1) The Code of Civil Procedure (Amendment) Act (I of 1914);

(2) The Destructive Insects and Pests Act (II of 1914);

(3) The Indian Copyright Act (III of 1914);

(4) The Decentralisation Act (IV of 1914);

(5) The Negotiable Instruments (Amendment) Act (V of 1914);

(6) The Provincial Small Cause Courts (Amendment) Act (VI of 1914);

(7) The Indian Telegraph (Amendment) Act (VII of 1914);

(8) The Indian Motor Vehicles Act (VIII of 1914);

(9) The Local Authorities Loans Act (IX of 1914);

(10) The Repealing and Amending Act (X of 1914); and

(11) The Indian Companies (Amendment) Act (XI of 1914).

## 19.—Police.

### GENERAL POLICE FORCE.

General.

76. It is a matter of satisfaction that the deplorable increase of crime of recent years has at last apparently received a check for the first time since 1909: excluding offences under local and special laws, and after allowing for the exclusion of the Delhi enclave, a decrease of 3 per cent. is recorded. The situation, however, is still serious. Various measures have been suggested, some of which may be adopted; but the root of the matter is the securing of the co-operation of the people in the suppression and detection of crime. Unfortunately, considerable apathy still exists among the people with notable individual exceptions, but there are some hopeful signs that a more healthy state of public opinion is rising. In this connection an interesting movement was started in the Gurdáspur District where village committees or Panchayats have been formed to check petty crime, drunkenness and illicit distillation and generally to promote unity and harmony among the members of the village community. In several villages, where such committees have been formed, there has been a diminution in such offences, offenders being subjected to small fines or threats of ostracism or simply to the displeasure of public opinion. It is too early as yet to say whether the movement will last. Much is also done by sending petty complaints to local men of influence in the hope that they may effect compromises. As in the case of cycles of depression in trade, it is perhaps impossible to give any satisfactory explanation of periodical outbreaks of violent crime such as broke out in the Punjab in 1898-99, and again in recent years; but much may be attributed to the growing intelligence of the criminal, to the decrease of awe of the Police, and to the measures taken by Government to eradicate

oriental methods of investigation. The investigator has thus fewer chances of success unless—and this is what the law assumes and expects—he receives the assistance of the community in the detection of crime.

**Murders.** 77. The gravest feature in the figures of crime is a large increase in the number of murders, but the proportion of convictions has fortunately risen from 37 to 46 per cent., and if this improvement can be maintained it should foster respect for human life. If not, it may be necessary to take up again the question of amending the law so as to provide for effective confiscation of the murderer's property, which in the case of ancestral land, is at present impossible. Delays in the final disposal of murder cases are another source of help to the murderer.

**Dacoities.** 78. There has been a slight decrease in the number of dacoities, but the number is still three times what it was in 1909. As a further measure of precaution, effect has been given to the suggestion made last year for the strengthening of the mounted police force throughout the Province, and in some of the most disturbed places new police stations and posts have been sanctioned, the cost of these being defrayed by punitive cesses.

**Theft.** 79. The statistics show a decrease in burglaries, thefts and rioting. Special action was taken in the Karnál and Ambála Districts against cattle thefts. In Karnál an officer was placed on special duty; 103 persons were tried and convictions against a large percentage of the accused were obtained. These cases have had a satisfactory effect in checking cattle thefts, and it is hoped that the improvement may be maintained.

**Police working.** 80. Police working as judged by judicial statistics has been on the whole more successful than in 1912, the percentage of cases convicted to cases tried, being 68 as compared with 65. In bringing cases to trial the results, however, are still poor, 56 per cent. of the total number of true cases in classes I to V never having been brought into court at all.

**Preventive sections.** 81. The security sections again met with a good deal of criticism, and suggestions have been made by officers of experience for radical alterations in the system. Reference is also made to the difficulty of insisting on good sureties and the remissness in the recovery of forfeitures. Proposals are being made for the better control of bad characters.

**Extension of Frontier Crimes Regulation.** 82. Proposals have been made for the extension of the Frontier Crimes Regulation to some Punjab Districts, and if there is no improvement in the state of crime in the Trans-Jhelum districts in the course of next year, the question will be taken up as a whole.

**Disregard of authority.** 83. Cases of assaults on the Police and other officials while in the execution of their duty are unfortunately still much in evidence in the Western and Central Ranges. It is satisfactory to note, however, that in many of these cases the offenders met with well deserved punishment in the course of self-defence by the officers. In order to stimulate and organize popular assistance to the Police, the amount paid under Rewards has increased and may be further increased; and a large area of land on the Upper Jhelum Canal has been set aside for grants to those who render services to the Police in the districts of Rawalpindi Division.

**Criminal Investigation Department.** 84. This Department continues to do very successful work, but the enormous increase in the work has rendered its task an almost impossible one and a re-organization of the department is now under the consideration of Government.

**Finger Print Bureau.** 85. The work of the Finger Print Bureau continues to increase and the courts are realizing the advantages of the system as an aid to the administration of civil justice, fees realized for expert evidence by bureau officers having risen from Rs. 2,500 in 1907 to Rs. 7,000 in 1913. The reproduction of finger impressions by means of photography has been a subject of considerable attention.

### Chemical Examiner.

86. The outturn of work has been normal. The figures relating to the decline of arsenic poisoning are remarkable. The average percentage of human poisoning cases in which arsenic was detected in the quinquennium, ending in 1902, was 60. During the next five years the Poisons Act of 1904 came into operation and since then the percentage has steadily fallen and now amounts to only 30·87. On the other hand, the percentage of poisoning by means of opium has increased to 43·26 as compared with 32·7 in 1912 and 27·05 in 1911.

### Rural Police.

87. Most of the reports contain interesting remarks on the amount of assistance rendered by the people to the Police in giving effect to the river patrolling, and to the "Thikri Pahra" and "Naka Bandi" systems of patrolling. During the year 14 zaildars, 270 lambardars and 260 chowkidars were punished for neglect of their duties, but, on the other hand, a sum of Rs. 22,521 was distributed in rewards amongst 195 zaildars, 385 lambardars and 263 chowkidars and 1,449 other members of the public. From most districts there have been appeals for more money for rewards, as, with the present allotments, it is said to be impossible to reward adequately for help rendered.

### Criminal Tribes.

88. The general question of the future policy of the Government in regard to the management of criminal and wandering tribes in the province has recently been a subject of investigation by a committee. The comprehensive report which has now been submitted to the Local Government is still under consideration; otherwise there is little to record except perhaps the steady improvement in the conduct of the Bauriahs, a large number of whom have taken to an honest livelihood in Ferozepore. They provided good trackers and on the occasion of cattle fairs have rendered useful assistance as temporary chowkidars.

## 20.—Criminal Justice.

89. Sufficient remarks have already been made under the section "Police" in regard to crime, and in this section only the working of the courts and certain special Acts need be referred to.

In the courts as a whole, prosecutions have been slightly more successful than last year, and it is hoped that with the strengthening of the prosecution agency, which is now under consideration, the gain made will not be lost again. The average duration of cases in this province, however, appears to be considerably in excess of that in the Province of Agra. It is recognized that there is a direct relationship between the speedy disposal of cases and the percentage of convictions.

Sentences to rigorous imprisonment for 15 days or less have dropped from 1,461 to 1,032, two-fifths of these sentences having been inflicted by magistrates of the 2nd and 3rd classes by whom most of the cases punishable with one month's imprisonment are tried. Sentences of from six months' to two years' imprisonment of either description have increased from 5,424 to 5,730 and of over two years from 1,585 to 1,809.

Labourers' Act.

90. This Act (XIII of 1889) is again being criticized, but the Chief Engineers, in both branches of the Public Works Department, have given their opinion in favour of its retention. It is necessary, however, that its working should be carefully watched, as its objects are often misunderstood and the Act tends to become an instrument of tyranny in the hands of unscrupulous contractors.

91. Something has been done since the close of the year to remedy a very frequent cause of complaint by raising the rates of diet money payable to witnesses. Witnesses.

92. Steps are being taken to extend the system of registration of marriages, particularly of "Karewa" marriages, but so far the measures taken are necessarily incomplete, as the question is a delicate one. Until this matter can be settled it seems unlikely that, with the continuing shortage of women, the lamentably great amount of litigation both in the criminal and civil courts will diminish. Registration of marriages.

## 21.—Prisons.

93. The daily average of prisoners in the jails of the province has continued to rise and now stands at 13,613, which strains available accommodation. Surplus prisoners are kept in workshops and tents and proposals for the construction of a new Central Jail at Jullundur are now before Government. This rise is due not only to the recent increase in crime, but also to the steady tendency of the courts towards longer terms of imprisonment. Admissions.

94. The number of prisoners released on appeal has increased in even greater proportion than the number of convicts sent to jail. In the period 1903—06 it was 17 per cent., last year it was 26, and is now 29. Releases on appeal.

95. There has been a remarkable diminution in the number of jail offences, and the Inspector-General claims that the improvement in the behaviour of convicts is due to the simplification of the remission system and to the fact that in jail discipline more reliance is now placed on rewards than on punishments. In 1908 there were 56,837 prison offences, in 1912, 33,724, and in the present year only 29,461. The efficiency of work does not seem to have suffered by the change of method, for the prisoners now thoroughly understand the remission system and know to a nicety how many days' remission they have earned by good work and conduct. These reforms, however, while excellent in some ways, also carry dangers with them. It may be that improved conduct in jail merely indicates a desire to escape as early as possible from irksome restraint and does not imply any improvement in character. It is therefore essential to keep in view the punitive and deterrent, as well as the reformatory aspects of imprisonment. Transportation is no longer the bogey it once was, and prison reform may be going too far if it converts what should be a penal settlement into a rescue home. There is perhaps some reason to fear that imprisonment has ceased to be a terror while, owing to the backward state of public opinion among rustics, it has not as yet become a disgrace. Methods of administration.

96. The reformatory aspect of the treatment of the prisoners is seen particularly in the Borstal Central Jail at Lahore. A brief description of this jail was given in last year's Administration Report and work has continued to develop since then, though much still remains to be done before the jail can be considered complete in every way. It is too early as yet to speak with knowledge of the results, but it is clear that every effort is being made to turn the inmates into useful members of society. The Salvation Army has taken the lead in smoothing the way for their return to freedom, convicts who desire being sent to the Army's Settlement at Danepur some months before release for post-prison treatment, and it is hoped that other religious and social organizations will in time be found able and willing to co-operate. The Muhammadan, Hindu and Sikh communities regularly send religious teachers on Sundays to the jail, but the organization which exists in England for finding employment and for generally helping such prisoners on their release is still lacking and for the supply of such organization public opinion and efforts must be relied upon. All convicts between the ages of 16 and 21, with over four months' sentences, are sent to the Borstal Institute, care being taken as far as possible to separate habitual and casual prisoners. Borstal system.

Expenses of maintenance and guarding.

97. The average cost of feeding a prisoner is 5 pice a day, and this is sufficient to keep a man on hard labour in health and strength. The net cost per prisoner, all charges included, is Rs. 62-4-0

Public interest.

98. The public so far do not take much interest in the management of jails, and non-official visitors, with some notable exceptions especially at Multán, did not display much interest in their duties.

## 22.—Civil Justice.

Institutions.

99. The total number of suits instituted indicates a slight decrease even after allowing for the exclusion of the Delhi Province. The decrease has been almost entirely in suits for money or moveable property and mainly in regard to verbal contracts. The decrease cannot be put to the credit of the Civil Panchayats Act, because there has been an unfortunate delay in setting the machinery of the Act in motion in the districts selected for the experiment. The fall in the number of money suits is remarkable in Jullundur, Hoshiárpur, Ferozepore and Gurdáspur, and this seems to indicate that the Co-operative Credit Societies which flourish in those districts have helped to diminish the litigation. Another point of interest is that suits brought by money-lenders and shop-keepers against agriculturists have dwindled from over 100,000 in 1912 to 68,500 in 1913. This is a healthy symptom and a practical vindication of the policy of the Land Alienation Act.

Disposals.

100. The disposals were normal and the pending file of original suits in subordinate courts remains practically where it was. The respective average durations of contested and uncontested regular suits, however, rose from 70 and 36 to 75 and 38 days.

Munsifs.

101. The efficiency of the Munsif's service continues to improve, and one Divisional Judge has recorded his opinion that "the work is now so extremely good that men who some years back would have been considered shining lights are now not more than average." The bulk of the original work is now in the hands of Munsifs and there is a steady decrease in the share borne by Assistant Commissioners. This is in some ways regrettable as the practical training of Assistant Commissioners in Civil work has always been a special feature of the Punjab, and one which contributes materially to their efficiency by keeping them in touch with one of the most important branches of administration. The corollary of this remark, namely, that it is also important for Civil Judges and Munsifs to be acquainted with the details of the revenue system, has been kept in mind, and it is hoped that the scheme which has now been worked out for this end by the Financial Commissioners will come into effect in the cold weather of 1914-15.

Chief Court.

102. The strength of the Court remains at seven Judges, and applications have been made for the continuance of the two appointments of temporary Additional Judges after the commencement of the vacation of 1914 when their present terms expire.

The prospect of reducing the number of Judges below seven without sacrificing efficiency may be said to have vanished, and there are indications that further additions may be necessary before long.

General.

103. The Pre-emption Act of 1913 has been severely criticized by the Judges on the ground that it encourages speculation and dishonest litigation. As this Act has only been working for less than two years, however, it is not yet time to take any steps for its alteration or repeal.

The number of insolvency applications before the Courts continues to increase at an alarming rate, and this appears to indicate some radical defect in the Insolvency Act or its working; its abuse is said to be most frequent in Colony districts, and a special report is being submitted to Government in this connection.

No definite steps have yet been taken to remedy the evils referred to in former reports in connection with the Guardians and Wards Act.

The principal event of general interest affecting the Civil courts which occurred in 1913, was the financial crisis of which the failures of the Peoples' Bank, Amritsar Bank and Lahore Bank were noteworthy examples. For a time after the close of the Peoples' Bank the rate of interest on good security rose as high as 24 per cent., and though it has now returned to a more normal figure, the effects on credit of this crisis are likely to be felt for a long time to come.

## 23.—Registration.

104. The outstanding features of the last three years have been the steady growth in the prosperity of the province and the remarkable rise in the value of land. This year again there has been a small increase in the number of sales affecting immovable property exceeding Rs. 100 in value, while optional registration of immovable property under Rs. 100 in value continues to decline, this being due not only to the increased confidence in mutation procedure but also to the increased value in land, which reduces every year the number of transactions in which the price recorded is less than Rs. 100. Income from registration fees has increased by 6 per cent. since 1910.

105. There appears to be no ground for the belief that members of agricultural tribes are transferring their town property in increasing quantities. The causes of the steady increase of leases of immovable property are, however, receiving attention, as it is suspected that alienations which are really mortgages are often shown as leases in order to defeat the provisions of the Land Alienation Act. Land Alienation Act.

106. The minimum pay of Moharrirs was raised to Rs. 15 in 1911, but owing to the increased cost of living and to the increased registration work, definite proposals for improving their pay and increasing their number in certain offices have been submitted. Establishment.

## 23-A.—Legal affairs of Government.

107. The number of references for opinion disposed of by the Legal Remembrancer was 910 as compared with 897 in 1912 and 856 in 1911. The Secretary of State was plaintiff in 29 original civil suits; 20 of these were decided during the year, 13 being in favour of Government and 2 against, while 5 were withdrawn.

The Secretary of State was defendant in 79 original actions out of which 48 came to a conclusion in the year, 35 of the decisions being in favour of and 10 against Government, 1 was withdrawn and 2 were compromised. In land acquisition cases which are included in the above, a total enhancement of Rs. 9,225 was given as against an amount of 2¼ lakhs claimed by the owners above the Collectors' awards. Much attention is being paid to these acquisition cases and the Government Advocate has drawn up a note pointing out the most common mistakes and omissions which he has detected in appeals conducted by him in the Chief Court: this note is being circulated to all Government Pleaders. No revenue suits were brought by and only one brought against Government during the year and in that case a favourable decision was given. The amount of important criminal case work dealt with in the legal department has considerably increased, 1,233 cases (nearly all appeal or revision cases in the Chief Court) having been disposed of as compared with 740 in 1912. Of these, over 79 per cent. resulted favourably to Government.

## 24.—District and Local Boards.

108. Several district reports afford satisfactory indications that there is somewhat keener competition to serve on the Boards and greater interest than usual has been shown in the elections. Elections.

Working of the Boards.

109. The remarks made in last year's report about the growing interest of members in the work of the Boards and the assistance rendered by them in local affairs and functions and in giving valuable opinions on local topics are also relevant this year, though in some districts this interest does not take the form of action leading to practical results. The extent of practical interest manifested depends largely on the efforts which the District Officer makes to encourage it, and one of the most effective ways of doing this in the present state of local self-government is held to be that the Board should delegate responsibility to individual members or to sub-committees and thus provide a test of their energy and capacity. This system of sub-committees has therefore been extended considerably and local sub-committees as distinct from Local Boards have also been formed in some districts. It is noteworthy that it is chiefly in districts in which an attempt has been made to decentralise that real practical interest in matters administered by the Board has been shown by members.

Works.

110. The Sialkot District Board has started a demonstration farm which, if properly organized and supervised, should serve a very useful purpose. The Gujránwála and Karnál Boards are contemplating the foundation of industrial schools and such a school is already in existence in Amritsar.

Revenue.

111. The gross income of the boards continues to increase materially, and amounted this year to nearly 79½ lakhs as compared with 64½ lakhs in 1912-13. The local rate accounts for 3¼ lakhs of this increase and the balance is chiefly due to large subventions from Government, which are further described in section 45. With effect from the 1st April 1913, the contribution of 20 per cent. on the local rate which had up to that time been paid to Government for certain general services was remitted, and at the same time various smaller contributions which had previously been paid by Government to the boards were resumed. The policy of general grants-in-aid not ear-marked for specific purposes is approved by Government, as it leaves more scope for initiative in the expenditure of board revenues.

Veterinary.

112. The Veterinary dispensaries continue to gain in popularity in the greater part of the province. In Gurdáspur two were established by private enterprise and one by the Board. Marked progress has been made in the Ambála Division, three having been built in Gurgaon District, one in Rohtak, one in Ambála and five in Hissar.

Cattle-breeding.

113. The majority of districts are substantially increasing the number of bulls and the demands on the Hissar Cattle Farm were so heavy that they could not be fully met. The system of selling the bulls at half price to the villagers has not met with uniform success but has intrinsic merits, as it is obvious that much greater care will be taken of an animal which belongs to the village than of one which is merely entrusted to the care of a headman.

General.

114. Opinions have recently been taken concerning a proposal to empower District Boards by legislation to levy a land cess for the development of light local railways and tramways. This matter is now under the consideration of Government.

Rural sanitation is also being taken up, but it is doubtful whether any real improvement can be effected without special legislation on the lines of the Village Sanitation Act in force in the United Provinces.

## 25.—Municipal Administration.

Elections.

115. Though municipal elections as a whole seem to be raising a little more interest every year, it is only in a few larger municipalities that any marked enthusiasm is shown. Elsewhere, except where sectarian feeling runs high, the public is usually apathetic. The proportion of vacancies

contested was the highest in Ráwalpindi Division, standing at 14 out of 23 seats, whereas in the Multán Division there was only one contest for 34 vacancies. There is a tendency for better men to come forward as candidates, and it may be hoped that in course of time the best will not think it beneath them to seek the suffrages of their fellow-citizens. Many of these appear at present to be deterred from competing on account of the objectionable practices of some lower class candidates, which, according to one Deputy Commissioner, cause men of social standing to be ousted by "demagogues and wealthy plebeians." The elective system, however, has come to stay, and it is to be hoped that its abuse will gradually be eradicated by the growth of public spirit and that more men of standing will come forward as candidates.

116. Meetings were held with satisfactory regularity by all larger committees and with some notable exceptions the attendance of members has been good. **Meetings and attendance.**

117. The working of committees is reported to be generally satisfactory except where religious and social jealousies are prominent. Sub-committees continue to do useful work in most municipalities, and in order to encourage the growth of local self-government the question of replacing official office bearers by non-officials has been examined, and it has been found possible to appoint non-official presidents to a considerable number of committees. **Working of committees.**

118. The aggregate income of municipalities rose from 66 to 76½ lakhs, the increase being mainly due to larger contributions from Government. Such contributions amounted to nearly 14 lakhs. The most important grant was one of 9 lakhs to the Lahore Municipality for its sewage scheme. **Finance.**

119. Considerable attention is being now given to urban sanitation. Government recently issued a Resolution enjoining the employment of qualified Health Officers and Sanitary Inspectors in the larger municipalities, and has instituted a class for training sanitary inspectors. A resolution has also issued dealing with town-planning, town extensions and improvement of congested and insanitary areas. Town-planning is becoming an important matter owing to the tendency of well-to-do residents of larger towns to build dwelling houses in the suburbs. **Sanitation.**

120. Though the working of several committees still leaves much to be desired, yet a genuine public spirit is undoubtedly developing, especially in larger towns where the committees not only do good work within their own spheres of duty but also show a willingness to co-operate with the administration in other matters relating to the well-being of their communities. **General.**

## Taxation.

121. Despite defects, octroi continues to be the most popular form of taxation for it has the sanction of custom and is an indirect tax. The system of terminal taxation avoids many of the disadvantages of octroi and is now finding some favour; such a tax has, since the close of the year, been sanctioned in Sargodha and proposals are under consideration in about 10 other muncipalities; among these is Kasur where the octroi refunds amounted to not less than 68 per cent., a fact which should clearly illustrate the cumbrous nature of this mediæval tax. The conservancy tax of Simla and the water-tax of Lahore have been abolished. Direct taxes, such as the house tax and profession tax, are as unpopular as ever, though an indefinite impost varying with the means or circumstances of each tax-payer and known as a "*Haisiyat*" tax has at times found favour in small urban communities. This tax has been held to be illegal, but it has been suggested that it should be legalized on the lines of the United Provinces Small Towns Act.

## 26.—Military (Volunteers).

Strength and Distribution of Volunteer Forces.

122. The strength of the Volunteer Corps on the 31st March 1914 is reported to have been as follows:—

| Corps. | Company. | Station. | Officers. | Non-Commissioned Officers. | Privates. | Total enrolled strength. | Total number of efficients. | Sergeant-Instructors. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|
| Punjab Light Horse. | ... | Field Officers and Staff ... | 8 | ... | ... | 8 | 8 | 4 | |
| | A | Lahore ... ... | 4 | 17 | 105 | 126 | 120 | ... | |
| | B | Ambala ... ... | 1 | 5 | 45 | 51 | 51 | ... | |
| | C | Rawalpindi ... ... | 3 | 11 | 54 | 68 | 64 | ... | |
| | D R½ | Peshawar ... ... | 1 | 5 | 19 | 25 | 24 | ... | |
| | D L½ | Amritsar ... ... | 1 | 2 | 10 | 13 | 11 | ... | |
| | Detachment | Delhi ... ... | 1 | 7 | 32 | 40 | 39 | ... | |
| | E | Lyallpur ... ... | ... | 4 | 11 | 15 | 15 | ... | |
| | E | Multan ... ... | ... | ... | 2 | 2 | 2 | ... | |
| | E | Jhang ... ... | ... | ... | ... | ... | ... | ... | |
| | E | Sargodha ... ... | ... | 1 | ... | 1 | 1 | ... | |
| | E | Montgomery ... ... | ... | 1 | 5 | 6 | 6 | ... | |
| | ... | Reservists ... ... | 1 | ... | 81 | 82 | 82 | ... | |
| | ... | Add for Supernumerary Officers | 10 | ... | ... | 10 | ... | ... | |
| | | Total ... | 30 | 53 | 364 | 447 | 423 | 4 | |
| 1st Punjab Volunteer Rifle Corps. | ... | Field Officers and Staff ... | 12 | ... | ... | 12 | 12 | 9 | |
| | A, B, C and Cadet ½ Company. | Lahore ... ... | 10 | 31 | 197 | 238 | 211 | ... | |
| | D | Rawalpindi ... ... | 2 | 11 | 74 | 87 | 84 | ... | |
| | E | Amritsar ... ... | 3 | 9 | 55 | 67 | 67 | ... | |
| | F | Delhi ... ... | 2 | 9 | 68 | 79 | 76 | ... | |
| | G | Murree ... ... | 2 | 8 | 65 | 75 | 74 | ... | |
| | H | Do. ... ... | 1 | 9 | 49 | 59 | 58 | ... | |
| | I | Peshawar ... ... | 3 | 15 | 116 | 134 | 134 | ... | |
| | K | Ferozepore ... ... | 2 | 11 | 97 | 110 | 109 | ... | |
| | L | Srinagar ... ... | 5 | 7 | 60 | 72 | 68 | ... | |
| | M | Sialkot ... ... | 1 | 5 | 42 | 48 | 47 | ... | |
| | ... | Reservists ... ... | ... | ... | 149 | 149 | 149 | ... | |
| | ... | Add for Supernumerary Officers | 18 | ... | ... | 18 | ... | ... | |
| | | Total ... | 61 | 115 | 972 | 1,148 | 1,089 | 9 | |
| Simla Volunteer Rifle Corps. | ... | Field Officers and Staff ... | 11 | ... | ... | 11 | 11 | 5 | |
| | A, B, C, D, E and H. | Simla ... ... | 20 | 60 | 383 | 463 | 417 | ... | |
| | F and G | Sanawar ... ... | 2 | 16 | 144 | 162 | 162 | ... | |
| | ... | Reservists ... ... | 3 | ... | 84 | 87 | 53 | ... | |
| | ... | Add for Supernumerary Officers | 18 | ... | ... | 18 | ... | ... | |
| | | Total ... | 54 | 76 | 611 | 741 | 643 | 5 | |
| North-Western Railway Volunteer Rifle Corps. | ... | Field Officers and Staff ... | 14 | ... | ... | 14 | 14 | 6 | |
| | A, B, C and D | Lahore ... ... | 12 | 46 | 517 | 575 | 575 | ... | |
| | E | Ambala ... ... | 2 | 12 | 157 | 171 | 171 | ... | |
| | F | Saharanpur ... ... | 2 | 7 | 118 | 127 | 127 | ... | |
| | G | Rawalpindi ... ... | 4 | 18 | 155 | 177 | 177 | ... | |
| | ... | Reservists ... ... | ... | ... | 31 | 31 | 31 | ... | |
| | ... | Add for Supernumerary Officers | 1 | ... | ... | 1 | ... | ... | |
| | | Total ... | 35 | 83 | 978 | 1,096 | 1,095 | 6 | |

The Punjab Light Horse, the 1st Punjab Volunteer Rifles, and the North-Western Railway Volunteer Rifles were inspected in March 1914 and the Simla Volunteer Rifle Corps in May 1913.

The results were considered satisfactory.

## CHAPTER IV.

# PRODUCTION AND DISTRIBUTION.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

*Agriculture.*—(1) Report on the operations of the Department of Agriculture, Punjab, for the year ending June 30th, 1914.

(2) Annual Report of the Punjab Veterinary College and of the Civil Veterinary Department, Punjab, for the year 1913-14.

(3) Annual Report of the Government Cattle Farm at Hissár for the year 1913-14.

(4) Report on the Land Revenue Administration of the Punjab for the agricultural year ending 30th September 1913.

(5) Report on the working of Co-operative Credit Societies for the year ending 31st March 1914.

*Weather and Crops.*—(1) Report on the weather of the Punjab for the year 1913-14.

(2) Punjab Season and Crops Report for 1913-14.

*Horticulture.*—Report on the Government Agri-Horticultural Gardens, Lahore, for the year ending 31st March 1914.

*Forests.*—(1) Progress Report of Forest Administration in the Punjab for 1913-14.

(2) Report on the Administration and Accounts of the District Boards in the Punjab for the year 1913-14.

*Arboriculture.*—Progress Report on Arboriculture in the Punjab for the triennial period 1911-12 to 1913-14.

*Manufactures.*—Report on the working of the Factories Act in the Punjab during the year 1913.

*Trade.*—(1) Report on the Internal Trade of the Punjab by Rail and River for the year ending March 31st, 1914.

(2) Report on the External Land Trade of the Punjab for the year 1913-14.

(3) Report on the Joint Stock Companies in the Punjab for the year 1913-14.

*Public Works.*—Administration Report of the Public Works Department, Punjab, Buildings and Roads Branch, for the year 1913-14.

*Irrigation.*—(1) Administration Report of the Public Works Department, Punjab, Irrigation Branch, for the year 1913-14.

(2) Land Revenue Report as above.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

*Agriculture.*—(1) Statistics of British India, Part II, Commercial (Co-operative Credit Societies).

(2) Administration Report of the Army Remount Department in India for the year 1912-13.

*Crops.*—(1) Agricultural Statistics of India, volume I, tables 2-I and 3-I.

(2) Area and yield of certain principal crops in India.

(3) Prices and Wages in India.

(4) Variations in Indian Price Levels, 1914.

*Forests.*—Statistics of British India, Part IV (*b*), Finance and Revenue.

*Mines and Quarries.*—
- (1) Statistics of British India, Part I, Industrial.
- (2) Records of the Geological Survey of India, volume XLIII, Part 2.
- (3) Report of the Chief Inspector of Mines in India under the Indian Mines Act (VIII of 1901) for the year ending 31st December 1913.

*Manufactures.*—Statistics of British India, Part I, Industrial.

*Trade.*—(1) Accounts of the Trade carried by Rail and River in India.

(2) Statistics of British India, Part II, Commercial (Joint Stock Companies).

*Railways.*—Administration Report on Railways in India for the calendar year 1913.

*Irrigation.*—Statistics of British India, Part III, Commercial Services.

## 27.—Agriculture.

### Scientific.

General.

123. The progress of a department of this kind which has at the same time something to learn and much to teach, can hardly be measured by the intervals between annual reports, but no one whose memories of the Punjab travel back for a generation can fail to find matter for optimistic reflection in the history of the Department. There are two great obstacles to the conversion of the agriculturist to scientific methods of agriculture; one is the inexperience of the instructor (for an intimate knowledge of, and sympathy with, local conditions and the people is necessary for the propagation of new methods successfully) and the other is the absence of an intelligent response on the part of the instructed. On the one hand, the scientist has to graft his western methods in an eastern country, and by research and experiments to discover what modifications of these methods have to be made, and, on the other hand, he has to overcome the conservatism of the ages in unscientific cultivators suspicious of new methods, and apt to be discouraged by occasional failures. The vigorous efforts of the Department and the individual enterprise of more enlightened cultivators are undoubtedly, however, gradually gaining ground.

Experiments and Research.

124. Owing to adverse climatic conditions the year has not been favourable for experimental work with regard to wheat; experiments with indigenous cottons continue, but without any decisive results at present. An important test in reclamation is now in progress at Narwala which, if successful, should have far-reaching results in view of the large alkali-affected tracts in the Punjab, which are at present unfit for cultivation; progress, however, on the work has not been very rapid. Investigations in connection with the wheat weevil, cane-borers, and other pests have been continued, and among the minor activities of the Department there has been some progress in sericulture, while olive cultivation is also receiving attention. A lease of 3,000 acres on the Lower Bari Doab Canal has been given on condition that the lessee grows 400 acres of American cotton every year for seed and also grows other seed for the Department. Another interesting lease, also on the Lower Bari Doab Canal, is that of 2,000 acres to Sardar Jogendra Singh on condition that he cultivates the land by Fowler's double engine system of steam ploughing. This should enable a test of steam ploughing to be made thoroughly at no cost to Government.

Lyallpur College.

125. When the Agricultural College at Lyallpur was started, it was in the hope that sons of agriculturists would flock to it with a view to receiving a training which they should apply in their own walk of life, but these hopes did not show any promise of fulfilment and they may be said to have been laid aside by the Board of Agriculture when it resolved that such Colleges must be regarded primarily as training places for members of the Agricultural Department. The course has been modified accordingly, but there is also a Vernacular course which lasts only for six months and is meant to give practical manual training in the use of implements and this course is attended by the sons of genuine agriculturists, the hope being expressed that the course may ultimately prove to be one of the most practically important branches of the Department's operations.

Agricultural Associations.

126. The staff of the Agricultural Department tour in many districts and occasional demonstrations of implements are also given at fairs. Special agricultural associations have also been formed in several districts which give promise of rendering useful service to the agricultural community by demonstrating and extending the improved methods of agriculture. Each Agricultural Association consists of some 50 to 70 intelligent landowners and cultivators under the presidentship of the Deputy Commissioner, and every zamindar member is required to carry out some agricultural operations or to use some implements in the way recommended by the Department. A few implements are lent free of cost for a year or

so to members who have to give them a trial. An Agricultural Assistant is also posted to the district and tours round to the members advising and assisting them. There are two meetings a year at which the results of the operations undertaken and reported are discussed.

Popularization of improved methods by means of Co-operative Credit Societies is another measure which is being adopted and which may ultimately be more successful than the formation of separate Agricultural Associations. The Societies have been useful as seed distributors and in arranging demonstrations, and it is hoped to make co-operation in agriculture and in the marketing of produce a pendant to co-operation in credit. In this connection it may be noted that an attempt is being made to induce zamindari Co-operative Credit Societies to send boys to the Vernacular Classes at Lyallpur College. The Registrar of the Co-operative Credit Societies is also assisting with a scheme to train men in this class, who will then be employed by Societies as Agricultural Sub-Inspectors.

127. Sales of ploughs and other implements have continued at about the same rate as before and the progress is as great as can be expected in the conditions. Demonstrators are employed with the hope of increasing sales, but it is recognized that the best demonstrator is a cultivator who has himself used an implement and found it profitable and increase in this class of demonstrators is bound to be slow at first. Implements.

The superior staff of the Department has been increased by the appointment of two more Deputy Directors; and the new Agricultural Engineer will, it is hoped, shortly be entering upon his duties. Staff.

## Loans to Agriculturists.

128. Loans amounting to nearly $2\frac{1}{2}$ lakhs were advanced under the Land Improvement Loans Act and rather more than 5 lakhs under the *Agriculturists'* Loans Act. The outstanding balance at the beginning of the year was rather over $19\frac{3}{4}$ lakhs. Over $6\frac{1}{4}$ lakhs were due for collection during the year, and the actual collections made amounted to Rs. 6,35,000. The outstanding balance at the close of the year was almost 21 lakhs, of which over Rs. 43,000 were suspended by competent authority and rather more than Rs. 16,000 were overdue. Under the Land Improvement Loans Act, the advances were chiefly for sinking wells, while the majority of the loans under the Agricultural Loans Act were required for the purchase of bullocks and advances for fodder and seed. The interconnection between the co-operative movement and the Loans Acts has been noticed in Section 16, above, and it only remains to add that the necessity of legislation with a view to legalize Takavi advances to co-operative societies was under discussion during the year. There is, however, no legal objection to loans intended for members of co-operative societies being distributed through the agency of these societies, and the Financial Commissioner has under consideration the advisability of adopting this method.

## Co-operative Societies.

129. The year has been a critical one for the co-operative movement in the Punjab on account of the disturbed financial situation due to the failure of some Indian banks, and the Registrar has very wisely devoted most of the energies of himself and his staff to the strengthening and consolidating of the existing societies rather than to expansion. As a result the number of new societies was less than in either of the two preceding years, but the number of members increased by 27,000 and now stands at 161,000. The financial progress of the societies, however, seems to have been unaffected as the total working capital has increased by over 76 lakhs and now stands at $184\frac{1}{4}$ lakhs for 3,333 societies. Such excellent results were hardly to be expected in view of the unsettled financial situation, and are a remarkable proof of the hold which the movement has succeeded in obtaining in the Province in spite of the fact that ten years have not yet elapsed since its inception. General.

Central Banks and Unions.

130. The working capital of the Central Societies has increased by about 16 lakhs, of which amount the Central Banks contribute some 11 lakhs. Practically all the Central Banks are doing well, and on the whole repayment of loans by the societies is satisfactory. The fact that the demand for loans is very irregular, makes it difficult to decide when to accept deposits, but with a view to regulating the excesses and deficiency in each district it has now been decided that the managers should send one another weekly information of their surplus and probable requirements; this scheme, however, has not yet been brought into effect.

Three new Unions were formed during the year. The difference between a Union and a Central Bank is that the former has as shareholders no individuals but only those societies which compose it. The result is that there is a closer and more sympathetic relation between the members of a Union than between those of a Central Bank.

Agricultural Societies.

131. The drop in the amount of deposits and increased withdrawals are the most marked features of the working of agricultural societies, but it is satisfactory to learn that the panic which led to the closure of so many Indian banks and even to a serious run on the Post Office Savings Bank, had comparatively slight effect on these rural banks.

There are now 3,261 village societies spread over 25 districts; in each society the average number of members is 47, and there is an average sum of Rs. 85 available for loans to each member as against Rs. 75 in the previous year. More than a crore of rupees are out on loan to members, 71 lakhs having been given out during the year and 40 lakhs repaid. Particular attention is paid to the punctual repayment of loans, and there has been improvement in this respect. A new rule has been passed for defaulters under which the Registrar has power to decide disputes himself or by the appointment of an umpire in cases where a man refuses to pay; the decision is treated as the decree of a Civil Court. For several years there has been a demand for some such summary procedure, and it will strengthen the hands of the managing committees.

The profit earned by the agricultural societies during the year is over 6 lakhs. If one quarter of this were put to reserve, the balance would allow a dividend of 15 per cent. being declared on the shares. Societies are gradually awakening to the possibilities of agricultural development. A good deal is now done in the way of joint sale of produce. In about a quarter of the societies of the Jhelum Colony, the members of each society sell their produce jointly through one or two enterprising members and realize better prices by selling when rates are high. A beginning has also been made in the purchase by Unions and individual societies of selected wheat and cotton seed from the Agricultural Department. Improved ploughs are coming into general use, bought both by societies and individuals.

Non-agricultural societies.

132. There has been no expansion under this head, though the societies show some progress. The 12 Weavers' Societies made a profit of 10 per cent. and the two Shoemakers' Societies show a profit of 90 per cent. on the share capital. Of the non-industrial societies by far the largest is the Lahore Government Servants' Society, of which the working capital is now 5½ lakhs, the deposits of members and non-members being equally divided. There are also 4 produce-selling societies and some of the members of one of these have, with the help of a loan from the society, taken part of the lease of the principal ginning mill at Pattoki. This is an important development, for until ginning comes into trustworthy hands, it is difficult to see how unmixed cotton can be exported and sufficient quantity of pure seed be available for future sowings.

Audit.

133. The cost of the societies to Government works out at an average of Rs. 11 per society, whereas five years ago it was Rs. 51. The Lieutenant-Governor has recently approved the scheme of taking contributions from societies to pay for the cost of audit, and this will enable the Registrar to

carry out his policy of moving on the staff paid by Government to new districts, in which the movement is still to be organized and fostered. The contribution will be at the rate of 5 per cent. on the annual profits, and will for the present only be levied from societies which voluntarily impose it on themselves by a resolution.

134. There can be no doubt as to the improvement effected in agricultural credit by means of agricultural societies, and it has been noticed that there has already been a substantial decline in the rate of interest demanded by money-lenders from agriculturists even in villages where societies do not actually exist. Among their miscellaneous activities it may be mentioned that these societies are also becoming awakened to the necessity of more school education for their children; they also continue to exercise a powerful check against extravagant expenditure on marriage ceremonies and the like. Their action in the matter of reduction in litigation and in the propagation of scientific agriculture has already been noticed and in many other ways they conduce to the advantage of the members. It is estimated that the amount of indebtedness already cleared off by means of co-operative societies exceeds one crore, and there are indications that the money-lending classes are beginning not only to realize the futility of opposing the movement but also to invest a part of their capital in it. A spirit of energy and self-respect is being created among the peasants where formerly there was often only apathy, fatalism, or despair. Developments in co-operation.

## Veterinary and Live-stock.

135. The Veterinary Department is making steady progress in winning the confidence of the people, which is an indispensable condition of success. No better proof of such confidence could be forthcoming than the fact that many private individuals have come forward to establish Veterinary Hospitals. General.

136. The working of the College is satisfactory and the percentage of passes among second and third year students has improved. The demand for admission continues to be very great and many of the candidates have to be refused. The demand for graduates is also exceedingly great not only for the Punjab, but also for other provinces, for Native States, for abroad, for the Transport and Remount Departments and for Mountain Batteries. There is thus a good case for the establishment of a second Veterinary College in Northern India, and this matter is now under the consideration of the Government of India. In the meantime, sanction has been given for new buildings for the Lahore College, and these are nearing completion. College.

137. The number of hospitals has risen to 114 as against 113 in the previous year, the addition being a hospital built by private enterprise in Gurdáspur District; other hospitals, also the result of private enterprise, are under construction. The total number of cases treated at the hospitals has risen considerably. Hospitals.

138. Efforts are being made to keep Veterinary Inspectors and Assistants up-to-date in their professional knowledge by means of local conferences presided over by a superintendent. A still more interesting and valuable experiment is that of giving lectures and demonstrations in villages. Miscellaneous.

The Veterinary Association, which was established last year, has proved a success and the quarterly journal in vernacular has done well.

During the year 11,522 villages were visited by different members of the Veterinary staff on tour and 102,447 animals were treated as against 9,918 villages visited and 63,416 animals treated in 1912-13. The Chief Superintendent considers that touring is the best method by which the amount of good work the department can do, may be demonstrated to the people.

In connection with breeding operations and epidemics there is nothing to record except that the number of castrations has greatly increased, the figures standing at 15,154 this year as compared with 2,268 which seems to show that the people are beginning to realize how undesirable bulls do harm.

### Government Cattle Farm, Hissar.

139. The Hissar Cattle Farm has suffered from a partial failure of the rains for the third year in succession. This means increased expenditure on the keeping of animals, and also involves risks to the stock. Financially, the position of the Farm shows an improvement. The value of the stock has risen from 4·62 lakhs to 5·28 and the income from Rs. 86,366 to Rs. 97,389.

The number of bulls issued (637) is the highest on record and the Director of Agriculture mentions a case in which Rs. 1,300 was paid for a single animal. The increasing interest in the improvement of the breeding of cattle is a very healthy symptom, and the steady distribution of well-bred bulls from the Farm must in time raise the standard over most of the Province. To secure this result it is very necessary that the supply should be equal to the increasing demand.

## 28.—Weather and Crops.

Character of the season.

140. The period from the middle of February to the middle of March 1913 was unusually wet, and conditions were therefore very favourable for sowings of sugarcane and cotton on irrigated lands and preparation of the land for autumn sowings. April was unusually dry, but precipitation in the 3rd week of May was abnormally heavy, and this, combined with the early setting in of the monsoon in the second week of June, stimulated extensive sowing of cotton, even at the expense of other crops. The rainfall of July, though in defect at most stations, was on the whole sufficient, but in August during which there were only two well-defined periods of wet weather, *viz.*, from the 2nd to 8th and 25th to 30th, the precipitation was very irregular, Ambála, Lahore, Ráwalpindi, Khusháb and Multán receiving more than their normal quantity, while the rest of the Province had a deficit. The monsoon withdrew from the Punjab altogether at the beginning of September, the slight falls in the 2nd week being connected with disturbances of extra Indian origin, but the rainfall of the earlier months was sufficient to mature a good autumn crop everywhere except in the south-east, where the unirrigated crops failed seriously. The conditions were especially favourable in the west and north-west of the Province, and in parts of the latter area the harvest was a bumper one.

Although October and November were practically rainless, and inundation canals stopped flowing early, abundant rainfall up to the middle of August left sufficient moisture in the soil for the sowing of the spring crop except in the south-east, where the August rainfall was insufficient, and in consequence unirrigated sowings were seriously restricted. In the north-west and west the area sown was considerably above normal. Showers in the first three weeks of December and at the beginning of January were general except in the south-east, and benefited the standing crops. A long spell of dry weather lasted until February 13th, when a well marked depression gave abundant precipitation both in the hills and the plains, and immensely benefited the crops, except in the south-east where the rainfall was too slight to revive them. In March precipitation was in defect, but the weather was abnormally cloudy and showery, and thunderstorms damaged the gram in places. The continuance of these unsettled conditions accompanied by hail up to the end of the third week in April caused some anxiety, but clear hot weather at the end of April and beginning of May permitted general reaping to be completed. Rain in the second week of May and at the beginning of June retarded harvesting operations, but fortunately did little damage to the grain. Like the

autumn crop, the spring crop was good everywhere except in the south-east, and was especially good in the north-west and west. In parts of the south-east there was a severe scarcity of fodder between December and May.

141. The total sown area was 1 per cent. less than in the previous year and 3 per cent. less than the estimated normal, but, owing to more favourable conditions, the total matured area was 1 per cent. better than in 1912-13, and only 2 per cent. below the estimated normal. Sown and cropped areas.

142. The sown area of wheat amounted to nearly $8\frac{1}{2}$ million acres, and though this is 3 per cent. less than the last year's area, it is only one per cent. below the estimated normal. The falling off is due to the unfavourable conditions at sowing time. In the south-east 53 per cent. of the area was irrigated. The season was favourable except in the south-east, and the total yield is estimated at 2,760,458 tons, or 15 per cent. above the normal, the percentage for irrigated and unirrigated wheat respectively being 119 and 110. Chief staples.

The out-turn of the other principal crops as compared with the estimated normal outturn is given in the following table:—

| Name of Crop. | Outturn in percentage of estimated normal. |
|---|---|
| Gram ... ... ... ... | 85 |
| Barley ... ... ... ... | 92 |
| Cotton ... ... ... ... | 173 |
| Jowar ... ... ... ... | 60 |
| Rice ... ... ... ... | 120 |
| Bajra ... ... ... ... | 91 |
| Maize ... ... ... ... | 105 |
| Sugarcane ... ... ... | 115 |
| Oilseeds ... ... ... ... | 88 |

143. The total irrigated area was $11\frac{3}{4}$ million acres or 48 per cent. of the total area sown. This is 2 per cent. more than in the previous year and is considerably above the average, which is due partly to the scarcity of rain in some months and partly to the opening of the Lower Bari Doab Canal and to a good supply of water in some inundation canals in the west. Irrigated Area.

144. The quinquennial cattle census was held in February 1914. Since the last census the seasons have been favourable in the Punjab, as a whole, but in the south-east dry area, which contains the famous Hariána tract, the autumn crops, which are the important ones for cattle, have been very short and fodder and grazing have been scarce and dear. So too, both in 1911 and 1912, the rains were scanty in the Ráwalpindi Division and Montgomery and the grazing poor. Thus it is in the chief cattle breeding districts that conditions since the last census have been unfavourable. The number of cow-buffaloes, cows, bullocks, horses and ponies, donkeys, camels and goats has increased, but the number of mules and male buffaloes has decreased. The total of sheep remains almost stationary. Agricultural stocks.

One of the noteworthy features of these statistics is the decrease in the number of male buffaloes which is attributed to the general well-being of the cultivators during the last few years having enabled them to replace their buffaloes by bullocks, which means a rise in the social scale. The male buffalo, owing to its sluggish nature and its inability to endure heat, is being found a beast fit only for the poorest ploughman or carter.

## 29.—Horticulture.

145. The income from the sale of garden produce shows a slight increase and is sufficient to cover three-fifths of the expenditure. The financial Agri-Horticultural Gardens, Lahore.

position is highly satisfactory, and will enable some much-needed improvements to be carried out.

The great majority of the 34 new varieties of eucalyptus planted in March last year are doing well. A five years' scheme for the improvement of the gardens has been published. During the year the Superintendent has visited 30 gardens in various districts to give advice on decorative gardening and fruit culture. Interest in fruit appears to be rapidly increasing and there is no reason why, with proper care and methods, the Punjab should not produce as good oranges as it does wheat.

There are now 25 boys and men in the three gardening classes and all are very keen and making progress.

## 30.—Forests.

### Forest Department.

General.

146. With the annual report for 1913-14, there has been submitted a summary of the progress during the five years 1909-10 to 1913-14. During this time there was a decrease of 700 square miles in the area under the charge of the Forest Department, 384 square miles being due to the transfer of land to the Canal Department for colonisation, and 244 square miles of Guzara (Unclassed) forests in Ráwalpindi, having been incorrectly shown on the books of the Forest Department, were struck off and 12 square miles of Protected Forests were made over to the Civil authorities.

The expenditure on communications and buildings increased gradually during the period, this being in accordance with the policy that such expenditure is necessary to develop the resources of the forests and to ensure the health of the staff.

The number of forest offences has risen from 7,379 in 1909-10 to 11,951 during 1913-14. This continued increase is chiefly under the head of illicit grazing, and there is no probability of any decrease taking place in the immediate future, for, with the progress in sylvicultural operations and more supervision, there must inevitably follow a greater need for preventing the occurrence of forest offences and an increase in the number of offences reported. Comparing the first with the last year of the quinquennium the annual out-turn of timber has increased by about 25 per cent owing to the increase in operations and that of firewood has decreased by about 28 per cent. owing to the decreased areas of fuel reserves under the department's control on account of colonization. The quantity of timber removed departmentally has decreased by about 39½ per cent. in pursuance of the policy of favouring extraction through contractors; on the other hand the departmental extractions of fuel rose considerably (50 per cent.) on account of the larger fellings in certain plantations and by the adoption of departmental fellings in the Ráwalpindi Division for the supply of fuel to the Military Department.

The gross revenue of the department rose from Rs. 9,75,486 to Rs. 13,57,527, the expenditure from Rs. 6,78,333 to Rs. 9,25,748, and the surplus from Rs. 2,97,153 to Rs. 4,31,779.

The work of the Forest Department in the Punjab is not confined to the Government forests. It is intimately concerned in various ways with the forests of many Native States; sometimes, it has the entire management of those forests, but, when possible, the Chiefs are encouraged to take personal control and management, the department merely assisting by advice and training and sometimes by deputing trained officers. Even in British territory the general forest policy is tending more and more to a diminution of the control of the Forest Department. During the period under review considerable areas formerly under control of the department have been placed under the charge of the district officers, and in the case of Guzaras of the

Ráwalpindi Division and certain areas in Kángra, the revenue obtained by the department is handed over to the district officers for distribution among the villages concerned or for expenditure by district boards.

Observations on the more important matters of the year 1913-14 are given in the following paragraphs.

Area.

147. There was a deduction of 262,064 acres, mainly due to the land given up for colonization purposes, chiefly in the Montgomery Division. Further similar reductions are expected in this and other districts where large areas amounting approximately to 800,000 acres are being disforested for colonization purposes. When this is done a very large portion of the plains forests under the charge of the Punjab Forest Department will have disappeared.

Forest Settlements.

148. The success of the new Guzara rules in the Ráwalpindi Division is still doubtful, and from a short inspection of certain Guzaras near Murree, it appears that here at least little check has been put upon the rapid destruction of the Guzara forests. The Deputy Commissioner, however, is endeavouring to make the influential villagers feel their responsibility for the protection of their Guzaras, and it is expected that this will do much towards attaining the desired object.

An important fact with regard to forest conservancy in Hoshiárpur has been settled this year. The settlement did not clearly state that the trees required by villagers had to be marked by a forest officer and they were being cut without restriction. A search of old records has proved that the villagers have no right to cut trees without permission and the necessary proviso has been entered into the record of rights.

Working plans.

149. Sanction was accorded during the year to the revised working plan for the Dalhousie range of forests of Chamba State, but beyond this no other new working plans were prepared and sanctioned during the year though considerable progress has been made in the preparation of revised working plans for the Murree and Kahuta forests. The area still requiring working plans remains the same as five years ago, *viz.*, 164 square miles, it having been found possible to undertake only the revision of the existing working plans as they expired.

Protection.

150. Increase in the number of detected offences has already been remarked upon. In the matter of protection from fire, there were encouraging indications from the Ráwalpindi Division, where only 7 fires covering ten acres took place as compared with 29 fires covering 745 acres last year, and the villagers turned out with the greatest alacrity to extinguish the few fires which occurred accidentally. From this, if progress is maintained, it may be surmised that the villagers have at last realized and begun to appreciate the efforts which are being made by the department to ensure them against destruction of their forest areas. The number of cattle impounded was 19,740, as compared with 24,655.

Reproduction.

151. The year was a bad seed year for almost all species. Deodar and Chil failed in every division, while Kail is reported to have seeded very well only in the higher hills of Ráwalpindi where it is rapidly establishing itself at the expense of other species. Normal operations were undertaken with varying results in artificial reproduction.

Experiments.

152. The experiment for the improvement of shisham regeneration was continued during the year; the cost is not likely to exceed Rs. 8 per acre, and considering that there will probably be a difference of between Rs. 120 and Rs. 160 per acre in the value of the outturn, the operation is financially extremely profitable.

Departmental firing experiments were carried out in the chir forest of Ráwalpindi on a much larger scale than the previous year and with greater success, 2,100 acres were burnt over and the trees sustained hardly any damage even where there was a considerable growth of bushes.

PRODUCTION AND DISTRIBUTION.

The results of the eucalyptus experiments in the Simla hills were on the whole satisfactory though the year was an extremely unfavourable one on account of the early cessation of the monsoon. In other divisions, the eucalyptus has not succeeded as well as was predicted.

The resin factory at Shahdara continued to work until the end of February when the work was discontinued in order to prepare for the erection of a new plant which is of French design and has been obtained through the India Office at a cost of Rs. 29,000. It is capable of dealing with 40,000 maunds of crude resin annually, the present estimated maximum annual output of resin of Punjab forests. The Shahdara factory having been damaged by floods, a scheme is on foot for the erection of a new factory at Jallo Railway Station, 9 miles east of Lahore. Considering the small scale of operations possible with the existing plant, the financial results have been satisfactory.

Outturn.

153. The total outturn of timber decreased by over 2½ million cubic feet, the main causes being an over-stocked market in Kángra and smaller sales from thinnings in Kulu. The out-turn of firewood increased owing to the larger fellings in certain forests in the Lahore Division and to the clearing of the areas in the Chenab, Montgomery and Multán Divisions for colonization.

Financial results.

154. The total revenue of the year was Rs. 13,57,527 as compared with Rs. 12,58,902, a net increase of Rs. 98,625. The expenditure of the year was Rs. 9,25,748 as against Rs. 8,09,072 in 1912-13.

Fruit culture.

155. These operations were, as hitherto, confined to the Kulu and Simla Divisions. In the former no new orchards were started, but the existing orchards are reported to be in good order and well stocked. Several consignments of apple, orange, cherry and plum-trees were procured from Australia and put out in new orchards, and are doing well. Apple grafting is now thoroughly understood and failures are comparatively few. Among zamindars themselves progress has been made in extending fruit culture, and numerous applications were received for the service of the orchard gardeners and for grafts. In the Simla Division matters were not so satisfactory, various serious diseases having occurred among the trees.

The experiments in olive cultivation are proceeding and steady progress is reported. The olive trees have now commenced to bear fruit in small quantities, and it will soon be possible to say whether this fruit is sufficiently good to compete with European olives.

## ARBORICULTURE.

District Boards and Municipalities.

156. The total length of avenues under the district boards and some municipalities in the Punjab at the commencement of the triennial period 1911-12 to 1913-14 under review was 9,014 miles and at its close 9,368 miles, showing an increase of 356 miles as compared with one of 712 miles in the previous triennium.

The total length of roads suitable for planting up with avenues is 15,251 miles, out of which 60·3 per cent. had been planted up prior to the beginning of the period under review. The increase during the period was 1·1 per cent., making a total of 61·4 per cent.

In all districts where avenues were planted the length planted exceeded the length of failures, and it is satisfactory to note that in several districts in which considerable lengths of avenues were planted there were no failures, Siálkot (100 miles) being conspicuous in this respect.

For the purpose of arboricultural returns the districts are classified into four groups and the following statement shows the progress made in each group:—

| | Length planted in the triennium. | Length failed in the triennium. | Percentage of total length planted to length suitable for planting. |
|---|---|---|---|
| | Miles. | Miles. | |
| Arid districts ... ... ... | 223 | 29 | 50 |
| Very dry districts ... ... ... | 69 | 13 | 61 |
| Dry districts ... ... ... | 272 | 126 | 58 |
| Fairly moist districts ... ... ... | 330 | 44 | 87 |

The area under groves has slightly increased during the triennium, but this is due to the transfer of certain areas from Canal to District management, the actual area successfully planted being only 31 acres, while that over which operations failed was 36 acres.

The area under plantations now stands at 1,081 acres as compared with 1,812 acres at the beginning of the triennium, but this decrease is more than accounted for by the transfer of 939 acres to the committee of the notified area, Delhi, and excluding other technical changes there has been a real increase of 8½ acres in the area stocked.

The area under nurseries increased from 278 acres to 1,327, this being almost altogether due to the transfer of an area in Shahpur District from the Canal Colony to District management.

The gross revenue from arboriculture during the period under report amounted to Rs. 9,41,000 or Rs. 1,72,000 in excess of that realised in the previous triennium, while the expenditure was Rs. 11,92,000 or Rs. 29,579 in excess of that incurred in the previous triennial period.

Canal Arboriculture.

157. As compared with the previous triennium the length of roads and canals suitable for avenues increased from 9,102 to 10,596 miles and the length actually planted rose from 5,313 to 6,235 miles. The length of avenues successfully planted was 1,184 as against 790 miles and the failures amounted to 196 as against 220 miles. There has thus not only been an increase in the length successfully planted, but also a decrease in the length of failures.

There are no groves under the Irrigation Department. The area under plantations increased from 25,542 to 26,948 acres. During the triennium 3,161 acres were successfully planted and 1,272 acres failed as compared with 2,240 acres successfully planted and 712 acres failed in the previous triennium. About half of the failures occurred on the Upper Jhelum Canal and were due chiefly to poor soil and insufficient rainfall. The area under nurseries has decreased from 75 to 28 acres owing to transfers to plantations.

The income during the triennial period amounted to Rs. 4,21,000 as compared to Rs. 3,81,000 in the previous triennium and the expenditure to Rs. 9,41,000 as compared with Rs. 7,86,000.

Arboriculture in Provincial Divisions (Public Works Department).

158. The length of roads and canals suitable for avenues is now 945 miles as compared with 920 miles in the previous triennium and the length actually planted is 800 as against 753 miles. One hundred and thirty-two miles were successfully planted during the triennium and failures amounted to 14 miles, the corresponding figures during the previous three years being 81 and 11 miles. The area under groves has slightly decreased and now stands at 638 acres, that under plantations has risen by 9 to 35 acres and that under nurseries has decreased from 31 to 15 acres mainly owing to transfers to groves.

The revenue of the period amounted to Rs. 85,000 and the expenditure to Rs. 1,26,000 as against a revenue of Rs. 92,000 and an expenditure of Rs. 97,000 in the previous triennium. The increase in expenditure is mainly due to a rise of Rs. 8,700 in Rawalpindi Division on account of establishment and a rise of Rs. 10,000 in Ambála Division on account of new plantation work undertaken.

General.

159. The following table shows in a concise form extensions and failures which have taken place in the avenues, groves and plantations under all kinds of management during the period under report as compared with the previous triennium :—

| | 1911-12 to 1913-14. | | 1908-09 to 1910-11. | |
|---|---|---|---|---|
| | Planted. | Failed. | Planted. | Failed. |
| Avenues (miles) ... ... ... | 2,200·98 | 421·47 | 1,829·58 | 476·63 |
| Groves (acres) ... ... ... | 31·73 | 35·96 | 43.45 | 16·00 |
| Plantations (acres) ... ... | 3,186·59 | 1,288·19 | 2,280·20 | 714·05 |

On the whole the triennium must be considered to have given satisfactory results, especially as the charge for establishment has decreased by Rs. 7.571. There is a strong tendency to replace the old establishment by properly trained men, and it is probably to this that increase in the amount of work done is attributable.

## 31.—Mines and quarries.

160. There are 8 coal mines in the Punjab, which come within the scope of the Indian Mines Act, 6 of them being in Jhelum, from which the output was over 46,000 tons, and 2 in Shahpur from which the output was nearly 5,000 tons. From the 4 Government salt mines in the salt range 138,540 tons of salt were taken. There are 5 slate quarries in Kángra and 4 in Gurgaon from which nearly 9,000 tons of slate were taken and from one limestone quarry in Hoshiarpur the output was 900 tons. No other mines in the Punjab come within the scope of the Indian Mines Act.

## 32.—Manufactures.

161. The number of factories in the Punjab rose from 222 in 1912 to 224 in 1913, and the average daily number of employés from 30,557 to 31,709: the figures for female and child workers were 3,864 and 792, respectively, compared with 3,564 and 703 in the previous year. In ginning factories—by far the most numerous class—male unskilled labour commands from 8 to 12 annas a day and female labour about half the amount. Considerable improvement is possible in the conditions in which the employés work: sanitation and ventilation in general leave much to be desired and a stricter observance is required of the provisions of the Factories Act, with regard to hours of employment. Convictions were obtained in the two cases brought during the year for breaches of the law in this respect: and instructions have been issued to institute prosecutions whenever there is clear proof of an important or continued disregard of the regulations governing the employment of factory labour. The number

of accidents fell from 262 to 231; but the decline was accompanied by an increase of 6 in the number of fatal, and of 13 in the number of serious accidents, and a considerable proportion were due to the inadequate fencing of machinery, and must therefore be considered to have been preventable. In this and other respects it is hoped that an improvement will follow the appointment of an expert Inspector of Factories who arrived from England in November 1913. He will be in a position to exercise a stricter and more efficient supervision than could be given by the District Magistrates and Civil Surgeons who were previously in charge of the duties of inspection, and his appointment should secure uniformity and continuity of policy in carrying out the provisions of the Factories Act. Under the new arrangements, District Magistrates continue to be *ex-officio* Inspectors in their own districts, but they no longer carry out periodical inspections: the duties of Civil Surgeons are confined to certifying children before they are given employment in factories.

## 33.—Trade.

### Internal rail and river borne trade.

162. The total value of the exports of merchandise from the Punjab in 1913-14 exceeded that of the imports by more than 2½ crores, and there was in consequence a large net import of treasure, chiefly of gold coin and bullion from Bombay. Imports of foreign piece-goods into the Punjab were stimulated by a fall in the price of European cottons, and rose by 116 lakhs: there were also heavy demands for marble, stone and metals in connection with the construction of Imperial Delhi, and of bridges over the Sutlej, Beas and Ravi, while scarcity of fodder at the end of the year in the south-east of the province led to an increase of over 20 lakhs in the value of imported cotton seed. But in spite of these increases, imports as a whole fell off slightly. A good cane crop lessened the demand for foreign sugar, and fewer gunny bags were required owing to a decline in wheat exports: these fell in value by 93 lakhs. The price in India was slightly higher than in the previous year, and the European demand for Indian wheat slackened owing to good harvests in the United States, Canada and Australia. The export of barley also declined owing to an abundant English crop. But these decreases were counteracted by large additional exports of gram, pulse, jowar and bajra to the famine-stricken areas of the United Provinces, and by increases in the exports of raw cotton, oilseeds and rice, due to good harvests. The value of the total exports of the Punjab was 209 lakhs in excess of that of the preceding year.

The growing popularity of a gold coinage is shown by the statistics relating to treasure. The stock of gold coin and bullion in the Punjab was increased by nearly 4½ crores in the course of the year: nearly two crores of rupees left the Province.

### Trade with trans-frontier countries.

163. Owing to changes in the location of registration posts, a comparison with the trade statistics of the preceding year would be misleading, except in the case of Afghanistan. In 1913-14 the balance of trade set in favour of the Punjab: exclusive of treasure, the recorded exports amounted in value to Rs. 18,38,000 and the imports to Rs. 15,79,000. This result was mainly due to the transactions with Central Asia, which took manufactured silk and cotton and woollen piece-goods to the value of Rs. 11,53,000, skins and maunfactured leather worth Rs. 1,72,000 and a considerable quantity of Indian tea and spices. These commodities were paid for in part by the export of large quantities of raw silk, wool and charas: but

the total imports of merchandise into Central Asia exceeded the exports by Rs. 6,41,000, of which a lakh and a half was liquidated in gold, and nearly half a lakh in silver. Afghanistan also imported more than it exported, but the value of the direct trade in either direction did not reach one lakh. The export of hides and raw wool is said to have been prohibited by His Majesty the Amir to protect factories lately established in his territories, and if the report is true, this measure may account for the considerable decline which took place in the value of manufactured leather, and piece-goods sent to Afghanistan. It is possible, however, that the difference is due to exports by rail *viâ* Quetta and Chaman, which are not shown in the Punjab returns. Trade with Chinese Tibet was practically confined to the import of wool which was valued at Rs. 3,86,000 in 1913-14: exports to this country were insignificant, and apart from the sale of small quantities of grain, rice and piece-goods, the indebtedness of the Punjab appears to have been met to some extent in bullion.

### JOINT STOCK COMPANIES.

164. The Punjab was visited during the year by a severe commercial crisis, in the course of which 69 companies, including 10 out of 22 companies newly registered, went into liquidation or for other reasons ceased to work: at the end of the year there were only 108 registered companies working, as compared with 155 in March 1913. The most serious failures were those of banking companies. Unsound methods of investment, and in particular the failure to keep a sufficient proportion of assets in liquid form led to a collapse which was very widespread in the case of Indian banks, and 21 institutions, with paid-up capital of about 25 lakhs, and deposits amounting according to their latest balance sheets to about $2\frac{1}{2}$ crores, were compelled to close their doors. Their failure was accompanied by the downfall of many insurance and trading companies, which had relied on the banks to finance their operations, and were in some cases under the same management. Apart from the actual loss to depositors and other persons immediately interested in the concerns, the crisis inevitably resulted in a contraction of credit, which did much harm to the trade of the province. It is to be hoped that it will clear the ground for the uprising of a better and more stable banking system.

Increasing indifference on the part of those responsible for the direction of companies with regard to the punctual filing of important documents, and even to holding a general meeting made it necessary to institute a larger number of prosecutions under the Companies Act during the year.

## 34.—Buildings and Roads.

165. The prosperous state of the provincial finances during the last year is clearly reflected in the report on the working of the Public Works Department, which is the chief spending department of the administration. The Punjab is now after many years in a position to meet the pressing demands for more and better Government buildings, and for improvement in communications incidental to a rapidly progressing province. The expenditure in the Buildings and Roads Branch of the Public Works Department amounted during the year 1913-14 to Rs. 91,60,282, the highest figure yet attained. In the two previous years the expenditure stood at Rs. 70,21,581 in 1911-12, and Rs. 79,70,169 in 1912-13. Most of the increase has been under the head of Civil Buildings, but there have also been increases under all heads of Provincial Works. At the same time the establishment charges have remained practically constant for the last 8 years. The result has been that the proportion of the cost of establishment to that of works has been reduced from 30·95 in 1909-10 to 13·27 in 1913-14. This decrease in establishment charges is satisfactory and

shows that when sufficient funds are forthcoming to meet the growing requirements of the Province and to utilize to the full the establishment available, the agency of the Public Works Department is not an expensive one. The lowest limit in the percentage of cost of the executive establishment of the department has, however, probably now been reached. The Provincial expenditure during the year amounted to Rs. 73,32,886, but there was a large lapse (Rs. 19,64,114) on the budget grant. Instructions have been issued for the exclusion from the budget in future of provision for schemes which have not been fully worked out, and it is hoped that in consequence future budget grants will be more fully and more economically utilized.

Many buildings have been erected for the Police and Educational Departments during the year. In the case of the Police Department, accommodation has been provided for a large number of the staff, both European and Indian. In the Education Department large schemes for the construction of high schools, normal schools, and boarding houses have been taken in hand in order to keep pace with the expansion of the department.

In the past year a considerable advance has also been made in improving the main line of road communications in the Province, which is partly due to the stimulus provided by the increased motor traffic. Three of the main rivers of the Punjab will shortly be spanned by permanent road-bridges. A new bridge is in course of construction over the Ravi at Lahore, and the old abandoned railway bridges over the Beas and Sutlej have been converted into road bridges.

The question of a more extensive use of stone metal, to replace kankar for the surfacing of the roads, is engaging the attention of the engineers. Kankar quarries are giving out in various districts in the neighbourhood of main roads, and the kankar obtained is of too inferior a quality to stand the wear and tear of modern traffic.

Sanitary work is assuming an ever-growing importance, and water-supply and dranage schemes have been undertaken in a number of towns.

A consulting architect has now been appointed for the Province.

166. The chief work completed during the year was the Imperial *Legislative Council* chamber at Simla, which has cost more than 4 lakhs. This building forms an extended wing of Viceregal Lodge and is handsomely designed and finished. **Imperial Works.**

The only other work of much importance was the provision of a combined gravitation water-supply for the cantonment and civil stations of Upper Dharmsala.

167. The Simla Hydro-Electric scheme, which was begun in 1908, has now been completed. It serves the dual purposes of supplying light and energy to Simla and also of supplying energy to pump water in order to augment the present supply. The total cost of this scheme has been 13½ lakhs and an additional 5½ lakhs has been spent on the extension of the water-works. The plant was maintained for nine months by the Public Works Department and then handed over to the Simla Municipality. **Provincial Works.**

The Dane Dam at Nammal in the Mianwali District which has now been completed, is the first large masonary dam constructed by the Punjab Public Works Department, and is a new feature in irrigation. It has been built across the rocky gorge of a stream and will irrigate an area of about 18,000 acres. The canal was opened in December 1913, and so the financial results are not yet apparent, but the people in the neighbourhood of

Mianwali will certainly benefit from the new water-supply. Another very interesting development in Public Works is the Grain Elevator at Lyallpur, which is the first attempt made at handling and storing grain by modern methods on a large scale in the Punjab. It is hoped that it will prove the first step in bringing the great export trade of Indian wheat into line with the up-to-date systems prevailing in Canada and the Argentine. The elevator has not yet been completed. The work of converting the District Jail, Lahore, into a Borstal Central Jail was completed during the year, the total expenditure incurred being $5\frac{1}{4}$ lakhs.

## 34 A.—Railway and Tramways.

168. On the North-Western Railway the open mileage is now 5,178 miles and 273 miles are under construction or sanctioned for construction. The total capital outlay up to 1913-14 amounts to 9,06,563 thousands of rupees, and the net earnings were approximately $4\frac{1}{4}$ crores, the percentage of net earnings on total capital outlay being 4·68; on the Commercial Section of the line the above percentage was 5·88 and on the Military Section was 0·02.

During the year the Jullundur-Hoshiarpur Branch was opened throughout its length. It traverses a rich part of the Punjab and connects Hoshiarpur, one of the very few district head-quarters in the Punjab not already provided with railway communication, with the main line. The earnings received since the line was opened indicate that the undertaking will prove highly remunerative, and have encouraged the promotion of a company for the construction of other branches in the neighbourhood. Hoshiárpur does considerable business with the Kángra Valley and this traffic has been attracted to the Railway. Among other schemes under consideration may be mentioned those for the provision of better railway facilities to meet the growing needs of the Punjab Colonies.

The Kálka-Simla Railway have started a limited service of rail motors between Kálka and Simla, which diminishes the duration and the inconvenience of that journey.

During the period under review it has been decided that all Local Governments, who may wish to do so may legislate for the levy of a small special railway cess by the District Boards; by this means, it is hoped, that much encouragement may be given to the construction of local feeder railways at the cost of Local Funds.

The net earnings of the Jagadhri Light Railway were Rs. 3,423, which gives a percentage of nearly 3 per cent. on the total capital outlay. This line is worked by a Limited Liability Company, the shares in which are held locally.

## 35.—Irrigation.

General.

169. The direct receipts and expenditure of the Irrigation Department during the year were Rs. 2,56,62,835 and Rs. 1,96,78,459, respectively, as against Rs. 2,28,97,431 and Rs. 2,29,78,853, the average of the previous triennium. The expenditure was practically divided evenly between the capital and working expenses. In addition to the direct receipts, the indirect revenue credited to the canals on account of the enhanced land revenue, etc., amounted to Rs. $110\frac{1}{4}$ lakhs—a considerable increase on the average credit on this account for the three previous years.

The following statement shows the year's financial results on canals in operation classed as Productive Major Works, and

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the area irrigated by each; the indirect revenue is included in column 2 :—

| 1 | 2 | 3 | | 4 |
|---|---|---|---|---|
| Name of Canal. | Net profit after including interest charges. | Percentage of profit on capital outlay. | | Area irrigated. |
| | | (a) including interest charges. | (b) excluding interest charges. | |
| | Rs. | | | |
| Western Jumna Canal (including Sirsa Branch). | 16,02,800 | 9·10 | 12·32 | 779,139 |
| Sirhind Canal ... ... | 20,60,050 | 8·11 | 11·33 | 1,357,928 |
| Upper Bari Doab Canal ... | 26,58,604 | 12·39 | 15·65 | 1,120,137 |
| Lower Bari Doab Canal ... | −6,32,464 | −3·38 | −0·24 | 73,578 |
| Upper Chenab Canal ... ... | −8,52,048 | −2·70 | 0·49 | 164,110 |
| Lower Chenab Canal ... ... | 1,21,22,566 | 38·86 | 42·15 | 2,245,598 |
| Lower Jhelum Canal ... ... | 27,96,491 | 17·51 | 20·82 | 823,532 |
| Upper Sutlej Canal ... ... | 3,34,072 | 18·56 | 22·75 | 287,290 |
| Sidhnai Canal ... ... | 3,79,574 | 28·50 | 31·80 | 254,705 |
| Indus Canals ... ... | 32,240 | 1·14 | 4·41 | 245,704 |
| Total ... | 2,05,01,885 | 12·22 | 15·45 | 7,351,721 |

The corresponding total amount of net profit on these Major Works in 1912-13 was Rs. 1,92,08,877, and in 1911-12 was Rs. 1,49,70,907, and the average irrigated area of these canals in the triennium ending 1912-13 was 7,144,660 acres, so there has been an increase both in the area irrigated and in revenue.

Western Jumna Canal.

170. The revenue was nearly 5 lakhs higher than the previous maximum receipts in any one year. The gross revenue collected was more than 9 lakhs above the average of the previous triennium, this increase being due to the increase in the area irrigated in the year 1913. The canal was in flow throughout the year and no closure could be resorted to owing to the deficiency of rain.

The area thrown out of cultivation by swamping along the lower reaches of the Main Line is being gradually improved by costly silting reaches, which are being formed to protect it. The benefit to the land alongside the upper reaches of the Main Line is enormous and enables several thousand acres of sugarcane to be grown on percolation water from the canal, for which no water rate is charged. A fourth division has been created for this canal which should add greatly to the efficiency of the work, as all the divisions were too unwieldy to be efficiently controlled.

Sirhind Canal.

171. With regard to irrigation, the year was, on the whole, favourable. There was an increase of 21·74 per cent. in the area irrigated in the autumn and a decrease of 4·52 per cent. in the area irrigated in the spring crop and the total irrigation for the whole year was greater than the average of the triennium ending 1912-13 and very nearly one and a half times as much as the average of the triennium ending 1909-10.

Compared with the year 1912-13 there was a decrease in the total area irrigated of 118,854 acres in British and Native States. This decrease was mainly due to rainfall not being so favourable for spring sowings as it was in the previous year. The canal was in flow for 165 days during

autumn and during spring for 182 days or for 347 days in all. No general closure was possible on account of the very scanty early winter rainfall.

The agricultural conditions were generally favourable. There were no calamities and crops were good. The river supply in the spring was considerably short of requirements and for some days in February only sufficed to give full supply to the Native States Branches, the combined Branch being entirely closed off.

Upper Bari Doab Canal.

172. Compared with the year 1912-13, the area irrigated shows a decrease of 50,579 acres, due to the absence of rain at the time of sowing the spring crops. The area irrigated in kharif (569,568 acres) was, however, the largest ever recorded, the previous kharif maximum being 552,032 acres in 1912-13.

The year, on the whole, was a prosperous one from an irrigation point of view. The tract served by the new 4th Division has had its facilities for water-supply much improved. Considerable improvements to distributaries in the way of remodelling Head Regulators and Head Reaches, etc., were made. The canal branches in the Division were also remodelled in several reaches and the work is still in progress. In the 2nd and 3rd Divisions difficulty is being experienced in effecting an equitable distribution of water. The tail villages of some distributaries do not get a proportionate share owing to villages in the upper reaches taking excessive amounts. The remodelling of distributaries and the opening out of natural drainages since 1908 are having an appreciable effect in rapidly disposing of surface water after heavy rainfall and hence in checking water-logging.

Lower Chenab Canal.

173. The autumn crop, though showing an improvement on the two previous triennia, was hampered by the absence of rain in the months of April and May. The bulk of rainfall fell in June, July and August and totalled somewhat in excess of the normal for this part of the year.

The spring crop was ushered in with good promise, as the late rains had helped extensive sowings, but the season proved extremely disappointing. There was no more rain till late in February and March, and standing crops were matured with the utmost difficulty. Notwithstanding these drawbacks the crop was not far short of the average of the last triennia. The total irrigated area was normal.

A heavy decrease of Rs. 1,46,874 in the assessment of owners' rates on this canal is due to the abolition of these rates in the villages recently reassessed. The assessment of land revenue, the rates for which were enhanced when owners' rates were abolished, shows a corresponding increase.

The rise of spring levels in certain areas and the approach of water-logging is receiving special attention, and it is anticipated that the programme of restriction of supply in such areas outlined by the Chief Engineer, together with the improvement of natural drainages of the country now being undertaken, will afford material relief and tend to progressive improvement.

Lower Jhelum Canal.

174. Hailstones and blight caused damage to wheat and gram crops in certain parts of the circle, and consequently remissions on those crops were granted on 5,820 acres. The season was, otherwise, a favourable one, the rainfall being better than in the previous two years.

The supply in the canal was sufficient and no rotational closures had to be enforced. It was closed at head for 29 days during autumn and for 33 days during spring. The irrigated area was somewhat greater than in 1913.

Upper Chenab Canal.

175. A general description of the scope of the project was given in the report for the year 1911-12. The canal was opened in April 1912, but

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it cannot be worked to full advantage until the completion of the Upper Jhelum renders the surplus water of the Chenab river available for the Lower Chenab Canal. The Upper Jhelum Canal will not be opened till 1915, and this canal will, therefore, continue to work at a disadvantage for one year more.

Good progress was made during the year on the construction of distributaries, and only a few comparatively small works remained to be carried out. The canal remained open from April to 14th October 1913 when the entire river supply was required for the Lower Chenab Canal. Compared with the project forecast for the year the area irrigated showed a falling-off of 35,890 acres. If, however, the figures for the two years (1912-13 and 1913-14) are taken together the area irrigated (280,272 acres) was well in excess of the forecast for those years, *viz.*, 240,000 acres.

The gross receipts (direct and indirect) amounted to Rs. 5,59,269 and the working expenses to Rs. 4,03,077, showing a net revenue of Rs. 1,56,192 or 0·49 per cent. on the capital outlay (excluding interest charges) to end of the year. This result is very satisfactory, as a net revenue of Rs. 92,000 only was anticipated in the project forecast for the second year after opening of the canal.

**Lower Bari Doab Canal.**

176. A brief description of this canal was given in the report for 1911-12. All the necessary works pertaining to the level-crossing having been completed the canal was formally opened by His Honour the Lieutenant-Governor of the Punjab on the 12th April 1913.

The excavation of the Main Line and all masonry works thereon, with the exception of the reinforced concrete syphon just above the level crossing, were completed last year. This syphon was completed during the year under report.

In order to utilize the summer flood water of the Ravi during the year the construction of water-courses on certain completed distributaries and their minors was pushed through with great vigour; 3,307 miles out of a sanctioned length of 3,846 miles being completed during the year.

On the whole the result of the first year's working was highly satisfactory, the actual area irrigated being considerably more than was expected. The canal is not yet working at a profit.

**Upper Sutlej, Sidhnai and Indus Inundation Canals.**

177. On the Upper Sutlej Inundation Canals and the Sidhnai Canal irrigation was normal, while on the Indus Inundation Canals a decrease occurred owing to the early closing of the canals in spring through the fall in the river's level.

**Upper Jhelum Canal.**

178. This canal is still under construction. It was expected that the work would be sufficiently advanced to enable the canal to be opened for spring irrigation at the end of 1914, but unfortunately the river bund breached and extensive flooding took place, which has caused a set-back of some months; otherwise satisfactory progress has been made and the excavation of the Main Line is finished, while the making of distributaries is going on well. Some trouble has been experienced in procuring labour which is becoming more and more expensive. This has been specially noticeable of late with the Mangla Regulator, where the progress is likely to be delayed by the scarcity of masons and suitable labour.

**Minor Irrigation Works.**

179. On the Shahpur inundation canals the season was favourable. The demand was keen and the supply in the canals adequate. The area irrigated and the revenue realized were both well above the average for the previous triennium.

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The area irrigated by the *Ghaggar canals* is very irregular; this year it was 19,560 acres and the canals as usual worked at a loss as no share of the indirect revenue from them (in fluctuating land revenue) is credited to the Canal Department unless it exceeds 37,000 rupees which it never does.

The Lower Sutlej, Chenab and the Muzaffargarh Inundation canals show an increase in the area irrigated, the area matured, and net revenue as compared with the averages of the previous triennium. The area irrigated from, and the revenue of, the Ravi Inundation Canals increased considerably, the net revenue being Rs. 8,180 against a loss of Rs. 14,108 in the previous year. This is due to the Deg Canal having run for a longer period than in the previous years, as its supply was supplemented by the escapage from the Upper Chenab Canal.

## CHAPTER V.

# REVENUE AND FINANCE.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

*Land Revenue.*—Report on the Land Revenue Administration of the Punjab for the agricultural year ending 30th September 1913.

*Canal Revenue.*—Administration Report of the Irrigation Department, Punjab, for the year 1913-14.

*Excise and Opium.*—Report on the Excise Administration of the Punjab for the year 1913-14.

*Stamps.*—Note on the Stamp Statements of the Punjab for the year 1913-14.

*Income-Tax.*—Report on the Income-Tax Administration of the Punjab during the year 1913-14.

*Forests.*—Progress Report of Forest Administration in the Punjab for 1913-14.

*Provincial Revenues.*—Budget for 1914-15 and Financial Statement, published in the *Punjab Gazette.*

*Local Funds.*—Report on the Administration and Accounts of the District Boards in the Punjab for the year 1913-14.

*Municipal Revenues.*—Report on the working of Municipalities in the Punjab during the year 1913-14.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Statistics of British India, Part III—Commercial Services.

Part IV (*b*)—Finance and Revenue.

Part VIII—Local Funds.

*Salt.*—Report on the Administration of the Northern India Salt Revenue Department for the official year 1913-14.

### 36.—Gross Revenue and Expenditure.

180. The Administration Report of 1911-12, paragraph 495, gives a description of the method of calculating the gross revenue raised in the Province and controlled by the Local Government, and the shares due to Imperial and Provincial Governments, respectively. The following table shows the receipts under the various heads of revenue in the year under report :— **Gross revenue.**

| Major heads. | Imperial. Rs. 1,000. | Provincial. Rs. 1,000. | Total. Rs. 1,000. | ± on figures for 1912-13. Rs. 1,000. |
|---|---|---|---|---|
| Land Revenue ... ... ... | 1,05,61 | 1,63,83 | 2,69,44 | − 24,03 |
| Opium ... ... ... ... | 6,52 | ... | 6,52 | + 55 |
| Salt ... ... ... ... | 38,41 | ... | 38,41 | + 6 |
| Stamps ... ... ... | 28,12 | 28,12 | 56,24 | + 1,01 |
| Excise ... ... ... ... | 34,57 | 34,57 | 69,14 | − 98 |
| Assessed Taxes ... ... ... | 8,60 | 8,60 | 17,20 | + 30 |
| Forest ... ... ... ... | ... | 13,55 | 13,55 | + 1,16 |
| Registration ... ... ... | ... | 3,78 | 3,78 | + 26 |
| Tribute ... ... ... | 1,45 | ... | 1,45 | + 3 |
| Interest ... ... ... | 41 | 2,34 | 2,75 | − 28 |
| Law and Justice—Courts of Law ... | ... | 5,54 | 5,54 | + 66 |
| Do. —Jails ... ... | ... | 3,94 | 3,94 | + 69 |
| Police ... ... ... ... | ... | 2,04 | 2,04 | + 5 |
| Receipts in aid of superannuation ... | 1,07 | 75 | 1,82 | − 18 |
| Agriculture ... ... ... | ... | 2,18 | 2,18 | + 21 |
| Education ... ... ... | ... | 4,49 | 4,49 | + 11 |
| Miscellaneous ... ... ... | 39 | 6,35 | 6,74 | − 3,74 |
| Irrigation—Major Works ... ... | 1,73,79 | 1,73,79 | 3,47,58 | + 19,38 |
| Do. —Minor Works ... ... | 9,03 | 76 | 9,79 | + 1,13 |
| Civil Works ... ... ... | 94 | 5,22 | 6,16 | + 26 |
| All other heads ... ... ... | 80 | 1,58 | 2,38 | − 1,26 |
| Total ... | 4,09,71 | 4,61,43 | 8,71,14 | − 4,61 |

Gross expenditure.

181. The expenditure during the year, excluding expenditure of the Military, Railway, Post Office and Telegraph Departments and capital expenditure on canals, was as follows :—

| Major heads. | Imperial. Rs. 1,000. | Provincial. Rs. 1,000. | Total. Rs. 1,000. | ± on figures for 1912-13. Rs. 1,000. |
|---|---|---|---|---|
| Land Revenue ... ... ... | ... | 49,10 | 49,10 | + 1,37 |
| Salt ... ... ... ... | 5,40 | ... | 5,40 | + 18 |
| Forests ... ... ... | ... | 9,19 | 9,19 | + 1,20 |
| Registration ... ... ... | ... | 1,20 | 1,20 | + 02 |
| Interest ... ... ... | 1,10 | 1,74 | 2,84 | − 09 |
| General Administration ... ... | 4,67 | 12,21 | 16,88 | − 33 |
| Law and Justice—Courts of Law ... | ... | 42,55 | 42,55 | + 37 |
| Do. —Jails ... ... | ... | 14,27 | 14,27 | + 1,12 |
| Police ... ... ... ... | ... | 58,93 | 58,93 | + 39 |
| Education ... ... ... | ... | 44,69 | 44,69 | + 10,22 |
| Ecclesiastical ... ... ... | 2,45 | ... | 2,45 | ... |
| Medical ... ... ... | ... | 13,72 | 13,72 | −12,10 |
| Political ... ... ... | 6,93 | ... | 6,93 | + 40 |
| Scientific ... ... ... | 1,36 | 9,66 | 11,02 | + 30 |
| Superannuation ... ... ... | 4 | 21,73 | 21,77 | + 2,15 |
| Stationery ... ... ... | 27 | 6,67 | 6,94 | ... |
| 33—Famine Relief ... ... | 1,62 | ... | 1,62 | + 1,41 |
| Reduction or Avoidance of debt ... | ... | 1,40 | 1,40 | ... |
| Irrigation—Major Works ... ... | 74,40 | 74,39 | 1,48,79 | + 2,80 |
| Do. —Minor Works ... ... | 9,39 | 2,84 | 12,23 | − 93 |
| Civil Works ... ... ... | 6,48 | 96,95 | 1,03,43 | + 30,17 |
| All other items ... ... ... | 5,14 | 7,11 | 12,25 | − 1,54 |
| Total ... | 1,19,25 | 4,68,35 | 5,87,60 | + 37,11 |

## 37.—Land Revenue.

182. As explained in paragraph 497 of *the Administration Report* for 1911-12, the land revenue as given in the Land Revenue Report concerns the agricultural year ending 30th September, six months preceding the end of the financial year, so there must always be a difference in the total collections as calculated by the Treasury and by the Financial Commissioners' office in their yearly returns.

The Land Revenue Report for the year ending 30th September 1913 returns the following figures, including collections on account of previous years, comments on which have already been made in Section 10:—

| | Rs. |
|---|---|
| Fixed Land Revenue ... ... | 2,09,49,339 |
| Fluctuating Land Revenue ... ... | 1,09,94,111 |
| Temporarily excluded from Fixed Land Revenue Roll. | 2,52,164 |
| Other Land Revenue ... ... | 52,08,656 |
| Total ... | 3,74,04,270 |

or, after deducting Rs. 86,23,424 due to irrigation, Rs. 2,87,80,846.

## 38.—Irrigation.

183. The total capital invested up to the end of 1913-14 on canals in operation classed as Productive Major Works was over $16\frac{3}{4}$ crores; the capital expenditure during the year was approximately $48\frac{3}{4}$ lakhs; the income from all sources after deducting refunds approached $3\frac{1}{2}$ crores; the working expenses amounted to over 88 lakhs; and the interest charges to $54\frac{1}{2}$ lakhs.

184. This leaves a net profit of 205 lakhs as compared with 192 in 1912-13 and $149\frac{3}{4}$ in 1911-12.

The balance profit on Imperial Canals, Minor Works not classed as Productive, was 9 lakhs, and of Provincial Canals was Rs. 35,000, both results being improvements on previous years.

## 39.—Exeise and Opium.

### General.

185. The principal event in the excise administration of the year has been the passing of the new Punjab Excise Act which came into effect on the 1st February 1914. This Act will greatly strengthen the hands of the excise authorities, especially by means of the enhanced penalties which it provides for various offences. The effect of the Act could hardly be apparent in the year under review; but the more stringent provisions of the new law should lead to a material reduction in drunkenness and in illicit distillation.

The total revenue brought to account in 1913-14 was Rs. 69,08,669 as compared with Rs. 70,12,432 in the previous year. But the latter figure included 6 months' collections at Delhi, and it was also swollen by the crediting in 1912-13 of large sums which had been placed in deposit in 1911-12. The actual increase of revenue in the year under review may be taken at about Rs. 4,91,000. This increase has occurred mainly in the receipts from country spirits—both in still-head duty and vend fees, and from sales of excise opium.

### Liquor.

186. The policy of reducing the number of retail licenses for the sale of country spirits has been steadily pursued, and the total of such licenses fell from 783 to 766 during the year. It appears however that a point has now been reached where a further decrease of shops merely sends the trade to the remaining shops or to the illicit-still. This view is borne out by the fact that the present reduction of shops has been accompanied by an increased consumption of about 13,000 gallons of country spirit, though the amount of this spirit consumed in the Province is not excessive as compared with the rest of India.

As was the case in the United Kingdom a generation ago, an increase in the prosperity of the people appears to lead to increased expenditure on drink. This tendency has in recent years been combated in the United Kingdom by the spread of more enlightened ideas and by the facilities given for more innocent forms of recreation, a field which offers scope for the energies of temperance and other social societies. Government is ready to assist well-organized efforts of this description. In this connection, the temperance movement is reported as having had some effect in Jhang, Lyallpur, Shahpur, Gujrat and Ferozepore, though in Amritsar, a stronghold of the movement, consumption of liquor does not appear to have decreased. Advisory committees have also been appointed in some of the larger towns with a view to associating men of influence with the regulation of the liquor traffic. A further movement, indicating increased interest on the part of the public in the suppression of excessive drinking, is the formation of Panchayats in the Gurdaspur District which has already been referred to in the section on Criminal Justice. The great difficulty of providing a counter-attraction to drink, however, still remains unsolved.

The increase in the income from licenses for the sale of foreign liquor has been accompanied by an all-round decrease in the consumption. The special or spiced spirit made in the Punjab distilleries appears to be gradually ousting the imported article, and a suggestion has, therefore, been made to tax this form of spirit at the same rate as the foreign liquor but, as control can be exercised over the operation of Punjab distilleries, while deleterious foreign liquors can be imported without any check except the customs duty, and as the substitution of the home made for the imported liquor is not a matter of regret, this suggestion has not met with approval. The advocates of higher taxation on spiced spirit would be on stronger ground if they could show that the manufacture of this class of liquor increases the total consumption, but this has not yet been proved.

The numbers convicted for drunkenness in the Municipal towns of the Punjab were 1,388 as against 1,301 last year.

## Opium.

187. The total consumption of opium of all kinds is practically stationary; the increased sale of hill opium is due mainly to its being now cheaper than the excise opium, although the latter is of a superior quality. The question of raising the price of excise opium still higher is under consideration, and when this measure is carried out it will be necessary to enhance the rates of duty on the other classes of opium consumed in the Punjab. The largest increase in consumption in any district is in Ferozepore, where it is reported that ⅘ths of the licenses are in the hands of small shop-keepers who have taken them in order to push their other business. Measures may have to be taken to put a stop to this combination of trades.

The profits on the sale of excise opium brought to account during the year were Rs. 6,29,632, an increase of Rs. 88,071, which is the result of the rise of the issue prices from Rs. 18 to Rs. 20 from 1st April 1913, issues having decreased by 1,363 seers.

## Hemp drugs and cocaine.

**Charas.**

188. The charas warehouses in the province were closed in October 1912 with the exception of those at Hoshiárpur, Sultánpur, and Ráwalpindi; but in view of the dislocation of other trade by this measure, the Amritsar warehouse was reopened in November 1913. The consumption of charas has sunk from 23,628 (excluding Delhi) to 21,789 seers, which is due at least partly to the increase of duty causing a rise in prices. The duty, which was raised to Rs. 11 in 1911, was again raised to Rs. 12 per seer in April 1913, and opinions are practically universal in favour of a further enhancement.

**Bhang.**

189. There are signs that the consumption of this drug is, if anything, on the increase, and the Financial Commissioner has been asked to consider whether any measures can be devised to check it. Not only have the reported sales gone up, but the seeds of the hemp plant are brought down by the canals, and it bids fair to be of spontaneous growth throughout a good part of the Province.

**Cocaine.**

190. Cocaine licenses decreased by 3 and sales to the public from 22,958 to 15,074 grains, but the prevalence of illicit trade is known. The cocaine habit is so far not suspected outside of the Ambála Division and in the towns of Lahore and Amritsar, but it is to be feared that it is advancing, and it constitutes a worse menace to health and morals than any other intoxicant in use in the Punjab.

## Excise offences and preventive measures.

191. The number of persons arrested for excise offences rose from 719 to 871 and that of persons convicted from 525 to 653. This appears to

show increased activity on the part of the Excise staff, a conclusion supported by the rise in the percentage of convictions from 73 to 75. There were no arrests for smuggling of cocaine, though this is known to exist, the small bulk of the drug and the absence of any characteristic odour rendering detection extremely difficult. Attention is being paid to the improvement of the prosecuting agency, as it has been found that acquittals often result from courts not having the law or the facts properly placed before them. The annual report on excise officers will in future include remarks on their capabilities in this respect and a qualifying examination in law will be passed before any officer is confirmed in the department. Various executive measures may also help such as the more liberal distribution of rewards or the expedient adopted in Lyallpur where all lambardars, in whose villages illicit distillation has been discovered otherwise than on information given by them, have been systematically dismissed.

The Excise Information Bureau has become a permanent institution since July 1913, and the Bureau is reported to have done very good work in co-ordinating and circulating information likely to lead to the detection of offences and also in actual detection. Smugglers are closely watched by the excise officers, and their departures from one station to another or to another Province are communicated through the Bureau to the proper authorities.

## 40.—Salt Revenue.

### Cis-Indus and Kalabagh Mines.

191. The quantity of salt excavated during the year was 3,793,480 maunds, which is an increase of 3·87 per cent. on last year's figure. The issues of over 38 lakhs of maunds were also 1 per cent. more than last year and the sales amounted to over 35 lakhs of maunds, an increase of a quarter per cent. The price of 1 anna 2 pies a maund remained unchanged throughout the year, and there was a net loss on working of three thousand rupees as compared with a profit of Rs. 2,937 in 1912-13, this being due to a slight increase of expenditure. The through traffic sales amounted to over 30½ lakhs of maunds and formed 94·47 per cent. of the total Railway borne trade of the division as compared with 94·83 per cent. in 1912-13. The through traffic collections were Rs. 47,968.

### Mandi Mines.

192. The sales from the Mandi Mines were 94,357 maunds, a slight increase on the previous year.

### Sultanpur Salt Works.

193. The sales continued to decrease and amounted to only 23 thousand maunds, a fall of 19 per cent. The price at which salt was sold by the manufacturers at the Sultánpur Salt Works ranged from 1 anna and 6 pies to 7 annas per maund, and the average price was 4·63 annas per maund. As the salt business at Sahidpur "Sarr" of the Sultánpur Salt Works had greatly declined and there seemed no prospect of material improvement that "Sarr" was closed in January 1914. The realizations on account of, Hakimi Cess at the sanctioned rate of 3 pies per maund, amounted to Rs. 362 as against Rs. 449 in 1912-13.

### Internal Branch.

194. Fees from licenses realised Rs. 4,781 this year as against Rs. 3,782 in 1912-13.

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195. Exclusive of the operations of the Internal branch, complete provincial figures for which are not published, the accounts for the Punjab, including excise duty, are as follows :—

| *Source.* | *Receipts.* | *Charges.* | *Net receipts.* |
|---|---|---|---|
| | | (In lakhs of rupees) | |
| Cis-Indus ... ... | 38·05 | 4·46 | 33·59 |
| Mandi ... ... | ·12 | ·05 | ·07 |
| Sultanpur ... ... | ·235 | ·09 | ·14 |
| Total ... | 38·405 | 4·60 | 33·80 |

From the net receipts a sum of Rs. 80,000 has to be deducted on account of treaty payment to Baháwalpur.

## 41.—Stamp Revenue.

196. The total revenue derived from receipts under the Court Fees and Stamp Acts in the territories now administered by the Punjab Government rose from Rs. 53,48,000 in 1912-13 to Rs. 56,29,000 in the year under report : and the growth which, with a few exceptions, is shared by all districts may be taken as a general indication of commercial and agricultural prosperity in 1913-14, in spite of the banking crisis. The value of judicial stamps issued to the public rose by Rs. 1,15,000; the increase followed naturally on the growth in the value of civil suits, and in particular on the enhanced valuation of land suits prescribed in the Court Fees Act, 1912. Prosperity generally results in an increase in litigation, and it is, therefore, not surprising to find evidence of the popularity of a legal career in a rise of 61 per cent. in the stamp duty on legal practitioners' licenses. The income from bills of exchange and impressed labels, the two heads specially affected by the bank failures, showed a considerable falling off in 1913-14. But, as a whole, there was an advance of Rs. 1,66,000, or 9½ per cent., in the receipts from non-judicial stamps, which may partly be attributed to the preference now shown by the money-lending classes for the execution of stamped agreements in transactions which they used to record only in their account books.

Elsewhere there is little to notice in the working of the Stamp Department during the year under review. The charges of the Department rose by Rs. 17,000 in consequence of the increase in sales, and there was a slight improvement in the number of cases in which insufficiently stamped or unstamped documents were detected by the Courts.

## 42.—Assessed Taxes.

197. The collections of income-tax in 1913-14 amounted to seventeen lakhs, an advance of Rs. 1,22,000 or nearly 8 per cent. The general rise in the cost of living is gradually forcing up salaries, and there was a considerable increase in the number of persons who paid income-tax as servants of Government, of local bodies, or of private corporations, while the amount obtained from this class of assessee rose by Rs. 15,000. The failure of a number of banks and firms hardly affected the tax on the profits of companies during the year under consideration, and by far the greater part of the total increase was obtained from the private persons and firms whose assessment is taken to the head—"Other sources of income." The number of assessees under this head rose by 2,068 to 25,980. Of the new assessees, 1,701 were in the classes which are taxed on incomes of less than Rs. 2,000, and these classes provide the large proportion of 43 per cent. out of the total revenue derived under part IV of the schedule. It is unlikely that this proportion adequately represents the distribution of wealth among the income-tax paying community, but owing to the difficulty of ascertaining the true income of private traders in this country,

it is ordinarily easier to add new names to the roll, than to raise an assessment which has once been imposed. In one direction action was taken in the course of the year to facilitate the work of the income-tax Collector. The North-Western Railway had previously refused to disclose the payments made to their contractors. This difficulty has now been overcome, and the information will be available in future for purposes of assessment.

The group method of assessment which was being tried in Siálkot did not prove entirely satisfactory, and was abandoned in 1913-14, except in Siálkot city. It was found to be of little assistance in determining the pitch of assessment, and the distribution of the total demand made by the panchayats was not always free from objection. It is, however, desirable to give a thorough trial to all expedients for improving assessments, and Deputy Commissioners have therefore been invited to introduce the system in any town where there is a likelihood that it will be successful. But real improvement in assessing processes must depend largely on the growth of a public spirit which will condemn the production by assessees of faulty or inaccurate accounts, and this growth can only be gradual. In the meantime, Collectors are being assisted by special assessing officers in large towns where the work of assessment is necessarily complex. An officer was employed on this duty in Amritsar during part of the year.

There was a small decline in the number of objections lodged against assessments, but more than one-third of the assessees still protest against the demands made on them, and 37 per cent. of the objections were successful.

## 43.—Forest Revenue.

199. The total revenue of the Forest year ending 30th June 1914 was Rs. 13·57 lakhs, a net increase of Rs. ·98 lakhs. The revenue was distributed among the major heads as follows:—

| | Rs. |
|---|---|
| Major Produce including Drift ... ... | 9·77 lakhs. |
| Minor Produce including revenue from forests not managed by Government ... ... | 2·9 ,, |
| Other heads ... ... ... ... | ·9 lakh |

The expenditure of the year was Rs. 9·25 lakhs, a net increase of Rs. 1·16 lakhs which was mainly due to greater expenditure under the head of Conservancy and Works, and a small addition of Rs. 7,781 under Establishment owing to the appointment of an officiating Conservator for three months, and an increase in the number of Rangers employed.

The net results of the year's working are as follows:—

| | | Rs. |
|---|---|---|
| Cash surplus ... ... ... ... | | 4,31,779 |
| Increase in value of live and dead stock ... | | 67,048 |
| Total ... ... | | 4,98,827 |
| Deduct— | Rs. | |
| Decrease in value of stock in depôts | 64,483 | |
| Decrease in outstanding of revenue | 6,242 | |
| | | 70,725 |
| Net result in favour of the year ... ... | | 4,28,102 |

## 44.—Provincial Revenues.

General.

200. The provincial shares of the revenue raised and the expenditure incurred in the Punjab during the last two years, with the opening and closing balances in each year, are displayed in the table below:—

| | 1912-13. | 1913-14. |
|---|---|---|
| | Rs. (thousands). | Rs. (thousands). |
| Opening balance ... ... | 1,03,73 | 1,77,84 |
| Income ... ... | 4,35,76 | 4,32,32 |
| Assignments from Imperial ... | 73,78 | 29,11 |
| Total ... | 6,13,27 | 6,39,27 |
| Expenditure ... ... | 4,35,43 | 4,68,35 |
| Closing balance ... | 1,77,84 | 1,70,92 |

Income.

The revenue from Irrigation showed an improvement of Rs. 9,78,000 in 1913-14, mainly due to the transfer of a larger sum from the Land Revenue head; forests brought in an additional Rs. 1,16,000, and there were increases aggregating Rs. 1,85,000 in Stamps and the two sources of receipt from Law and Justice. On the other hand, the Provincial share of Land Revenue, apart from assignments, fell by over 12 lakhs in the latter year, partly owing to the credit of a larger amount to the Irrigation Department, but mainly from a decrease in the receipts from the sale of proprietary rights in the canal colonies. Miscellaneous receipts decreased by Rs. 3,77,000 in consequence of the abolition of the contribution of 20 per cent. on the local rate, which had previously been recovered from District Boards.

Assignments.

There was a decrease in 1913-14 of nearly 26 lakhs in the assignments received from the Imperial Government for Education, and of over 7½ lakhs in the grants for medical and sanitary purposes. The grant of 12 lakhs made in 1912-13 in aid of general provincial resources was not repeated in 1913-14. But a new recurring assignment of Rs. 2,08,000 was received in the latter year in connection with the remission of the contribution from the local rate, and the net decrease is, therefore, Rs. 44,68,000.

Expenditure.

Provincial outlay exceeded provincial revenues by Rs. 6,92,000. The principal increases over the expenditure of the previous year occurred under Land Revenue (1·36 lakhs), Forests (1·20 lakhs), Jails (1·12 lakhs), Education (10·22 lakhs), Superannuation (2·55 lakhs) and Civil Works (28·19 lakhs). Under Medical there was a decrease of 12·11 lakhs mainly due to an alteration in the classification of grants paid to local bodies for sanitary works. The total increase in expenditure was Rs. 32,92,000.

## 45.—Local Funds.

201. The gross income of the District Boards in the Province has again risen materially, and amounted this year to Rs. 79,39,637 as compared with Rs. 64,47,063 last year. The local rate accounts for 3¼ lakhs of this increase as a result of recent re-assessments and other changes; the balance is almost entirely due to larger subventions from Government, especially for Education and Civil Works. Under these two heads alone the receipts have risen by nearly 10 lakhs. With effect from the 1st of April 1913 the contribution of 20 per cent. on the local rates which had up to that time been paid to Government by the Boards for certain general services, was remitted, and at the same time various smaller contributions, which had previously been made by Government

to the Boards, were resumed. The total contribution remitted by Government calculated on the local rate realized in 1912-13 would have been Rs. 4,28,000, while the aggregate contributions resumed were only Rs. 1,70,000. It was inevitable that a broad re-adjustment of this kind should be unequal in its effects and some boards have represented that they either did not materially benefit or actually lost by the transaction. It is clear, however, from the above figures that the Boards as a whole have secured considerable additions to their resources. This inequality in the incidence of this addition can be to some extent remedied by Commissioners, in whose power it is to vary the distribution of certain grants which have been placed at their disposal for the assistance of the District Boards.

Receipts under the head Education amounted to Rs. 14,21,387, an increase of nearly Rs. 4 lakhs, due chiefly to greater Government contributions and also to some extent to better receipts from fees. Expenditure has kept pace with the receipts, and rose by Rs. 3½ lakhs.

The income of the Boards under the head "Medical" fell by Rs. 20,707, owing to a falling-off in Government contributions, which was, however, partly counterbalanced by an increase in receipts from endowments. Expenditure rose slightly from Rs. 6,16,105 to Rs. 6,75,211.

Receipts under the head "Civil Works" rose from Rs. 18,01,332 to Rs. 23,94,467. The increase was chiefly due to larger contributions from Government. There was a corresponding rise in the expenditure amounting to Rs. 6,75,501. The construction and maintenance of communications account for the major portion of the expenditure, and it is satisfactory to note that nearly all Boards are becoming more fully alive to their responsibilities in this matter. The expenditure on construction rose from Rs. 2,34,978 to Rs. 3,02,232, whilst the charges for maintenance and repairs show an increase of Rs. 2,82,303.

No board has allowed its balance to fall below the prescribed minimum, and in several cases Boards have been unable to spend the grants made to them, and have closed the year with very large balances, notable among which were the balances at Lyallpur of about 4½ lakhs and of Multán, Gujránwála and Hissár, which were between 2 and 2½ lakhs.

### 46.—Municipal Funds.

201. The aggregate income of municipalities rose from Rs. 66,02,000 to Rs. 76,46,000, the increase being mainly due to larger contributions from Government. A number of municipal committees revised their octroi schedules during the year, and a substantial rise might therefore have been expected in the income from this source. The falling-off in receipts, however, in the Ambála, Ráwalpindi and Multán Divisions has almost counterbalanced the enhanced receipts in the other two divisions, and the total income from octroi has only risen by Rs. 62,000. Contributions by Government increased by over 6 lakhs, and amounted to Rs. 13,84,000. The most important grant was one of 9 lakhs to the Lahore Municipality for its sewage scheme. The remainder of the increase was due to other enhanced income from taxation amounting (excluding octroi) to about Rs. 20,000, an increase of Rs. 7,000 in the tax on animals and vehicles being the principal item, and to revenue derived from muncipal property and powers apart from taxation, the main items of increase being sale proceeds of land and produce of lands, etc., Rs. 85,000, and sale of water 16½ thousands; lastly, loans from Government amounted to 166½ thousand rupees more than in 1912-13. Expenditure has not quite kept pace with the receipts, but has risen by Rs. 4,93,000. The chief increase is under the head Public Works, amounting to Rs. 3,06,000, but "Water-supply" and "Public instruction" are responsible for Rs. 2,29,000 and Rs. 58,000, respectively. On the other hand, expenditure on drainage

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has fallen by Rs. 1,77,000. As much of this expenditure is of the nature of capital outlay, it is bound to vary from year to year, and too much significance should not be attached to annual fluctuations. No municipality failed to keep to the prescribed minimum balance, though several notified areas allowed their balance to fall below it. The new loans granted by Government in 1913-14 amounted to Rs. 4·38 lakhs. Lahore received 1 lakh for paving streets, Siálkot 3 lakhs for the water-supply scheme and Amritsar borrowed Rs. 38,000 for the renewal of the conservancy tram lines.

## CHAPTER VI.

# VITAL STATISTICS AND MEDICAL SERVICE.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

*Census.*—Report on the Census of the Punjab, 1911, by Rai Bahadur Pandit Hari Kishan Kaul, C.I.E.

*Births and Deaths.*— *Sanitation.*— } Report on the Sanitary Administration of the Punjab and Proceedings of the Sanitary Board for the year 1913.

*Emigration.*—Census Reports as above.

*Medical Relief*— { Notes on the Annual Statements of the Dispensaries and Charitable Institutions of the Punjab for the year 1913. Report of the Pasteur Institute, Kasauli, for the year 1913. Report on the working of the Punjab Lunatic Asylum for the year 1913.

*Vaccination.*—Notes on Vaccination in the Punjab for the year 1913-14.

PUBLICATION OF THE GOVERNMENT OF INDIA.

Statistics of British India, Part V, Area, Population and Public Health.

### 47.—Details of Census.

[*Vide* pages 157-67 of the Administration Report for the year 1911-12.]

### 48.—Births and Deaths.

202. The basis for the calculation of the rates of births and deaths per thousand of the population is the census population of 1911, but with a view to accuracy and as an illustration, some rates have been worked out from the census figures corrected and brought up to date by the vital statistics ; it has thus been ascertained that the use of the census figures of 1911 alone would, in 1920, give an error of nearly 5 per thousand in the rate. This matter is under consideration. General.

The year 1913 was a healthy one, though the death-rate of 30·2 *per mille* was higher than in the exceptionally healthy year that preceded it. With the healthy conditions recently prevailing the birth-rate continues to rise, the provincial rate of 45·4 being 3·1 *per mille* in excess of the average of the previous five years. Infant mortality was higher than in 1911 and 1912, though less than in many recent years, and there is no doubt that this rate might be considerably reduced by providing that midwives should receive a sound training in maternity cases and simple hygiene. Efforts are being made to realise this object, but the success of these efforts must to a great extent await the enlightenment of the public generally and the education of the mothers themselves ; at present 23 out of every 100 children born die before attaining the age of one year.

203. The total number of births in the Province was 878,241 which is the highest number recorded since 1900, and is due to the slight incidence of epidemic malaria in the autumn of 1911 and the general healthiness of 1912 and the first few months of the year under report. The rate was higher than in any other Province of India, except the Central and the United Provinces. Births.

204. Of the 583,784 deaths recorded in the Province, 304,326 were males and 279,458 females, the total death-rate *per mille* being 28·7 for males and 32 for females ; the total rate of 30·2 *per mille* was slightly higher than that of any other Province, except the Central and the United Provinces. Deaths.

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The urban and rural rates were 35·65 and 29·66, showing about the same difference as those of the previous year. A comparison of the average urban and rural death-rates in the periods 1875 to 1900 and in 1909 to 1912 shows that the urban rate is descending slowly, while the rural rate shows very little diminution—a fact which suggests that sanitary improvement in urban areas is beginning to have an appreciable effect. The exact diminution of 4·5 *per mille* in towns is equivalent to a saving of about 8,000 lives annually in municipal towns.

Cholera.

205. After four years of ordinary prevalence, one to two thousand deaths annually, cholera broke out in 1913 in a rather severe epidemic form in certain parts of the Province and was the cause of 5,811 deaths. Although the disease was reported from 24 districts, it was very localized in intensity, and out of over 33 thousand villages and 128 towns, only 590 villages and 46 towns were infected, the area of the greatest intensity being some districts in the Central Punjab. The apathy of the people in taking measures to check the spread of an outbreak is still noticeable, and even information of the appearance of the disease is frequently only given after many days, by which time much harm has been done. This apathy, curiously enough, is more evident in towns than in villages, where the villagers more easily assent to preventive measures and often ask for assistance. In a large number of villages during the epidemic of 1913 an outbreak was averted or prevented by the adoption of simple measures.

Small-pox.

206. The total number of deaths from this cause amounted to 38,687 or 8,348 more than that of the year preceding; this is the largest number recorded since 1896, and is about three times the annual number of the last 20 years. The epidemic was a legacy from the previous year and continued until the hot weather. The death-rate was lower in towns than in the villages and lower in towns where vaccination is compulsory than in those where it is not; but, even in the former, the provisions of the Act are not so vigorously enforced as they might be.

Plague.

207. The plague epidemic on the other hand was extremely mild, the total number of deaths recorded in British districts being only 17,904 as compared with an average annual mortality during the previous nine years of over 180,000. Thirty-nine medical officers were, however, employed on plague duty. This staff is also being utilized for imparting general instruction on sanitary principles, and is giving ordinary medical aid, and this portion of their work is well received and is bringing them in closer touch with the people. The number of their patients (other than plague patients) was more than double what it was in 1912. The main reason for the mildness of the plague epidemic was the early and comparatively weak monsoon which led to conditions most unfavourable for flea-breeding in its various stages, and therefore a weak link in the plague chain. There is also the fact that the Plague Department nipped many an outbreak in the bud and thus also eradicated *foci*, which would have been the origin of infection in many other villages.

Fevers.

208. Fevers accounted for 331,698 deaths, a rate of 17·15 *per mille* which is greater than in the two previous years. During the five years, that have elapsed since the severe 1908 epidemic, the average annual fever mortality has been lower than in any other quinquennium during the past 30 years. This point is of some consequence, more particularly in view of the fact that public opinion is inclined to believe that malaria in the Punjab is on the increase as the result of canal irrigation. This year the work of the Punjab Malaria Bureau has for the first time been summarized in an annual report. This bureau, although not of a permanent nature, has come into existence because there is no disease in the Punjab, not excluding plague, to compare with malaria in point of prevalence and importance. It affects all races and every social grade, and the classes as well as the masses pay an annual tribute to its ravages. It is

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one of the chief causes of infant mortality in this Province and its influence on the birth-rate is only less marked than on the death-rate. The report is of an *ad interim* nature and must be regarded as indicating the lines on which more comprehensive reports will be based in future; for until all the factors influencing malaria have been collected and studied over a series of years, it will not be possible to draw final conclusions in regard to any particular year.

## 49.—Emigration and Immigration.

210. (There is nothing to report under this heading.)

## 50.—Medical Relief.

### DISPENSARIES.

211. Ninteen new dispensaries were opened and 7 closed during 1913, leaving a total of 466 open at the end of the year. In addition to these, 28 of the canal dispensaries are open to the public. The daily average of indoor patients was 2,854·58 as compared with 2,698·39 in 1912. The total number of out-patients treated was 4,505,979, an increase of about 2 per cent. Number of institutions.

212. The most noticeable features in the statistics for the treatment of principal diseases are the large increase in the number of eye and ear cases and of cases of diseases of the skin and "other diseases of the digestive system," and a very marked decrease in the amount of malaria cases. The steady rise in the number of eye cases from 704,139 in 1908 to nearly 940,000 in 1913 is no doubt due to the ever-increasing confidence of the people inspired by the continued success of the skilful eye surgeons of the Province. Statistics of diseases.

213. Operations for cataract have increased from 29,332 in 1908-10 to 41,897 in the last triennium, and nearly 94 per cent. of the operations performed in the past three years have been successful. It is not, however, by cataract cases alone that operative surgery is winning confidence. Practically in all cases of operations, except lithotrity, there has been an increase, and the number of selected operations performed rose in 1913 to the highest on record. Surgery.

214. Contributions from Government towards medical institutions have increased annually, and those from district boards also show a steady improvement. In spite of the instances of individual generosity, the normal income from subscriptions, both from Europeans and Indians, is still very meagre. The system of charging fees for treatment and medicine to patients who can afford to pay, has not met with any success except in Ferozepore, but efforts are being made to introduce it generally. The total income of the hospitals and dispensaries from all sources amounted to Rs. 13,12,926. Finance.

215. Increased attention is being given to the medical education of women and the provision of better facilities for medical aid to them. The Northern India School of Medicine has now been recognised as the provincial medical school for women and will be supported by an annual grant from Government, provided that it is managed on a non-sectarian basis, is open to women of all creeds, and that there will be no interference with religious beliefs. The managers of the school have been asked to publish a new prospectus, and it is hoped that by advertising widely over the Province the new conditions and the objects of the school, a greater number of women will be attracted, and that in a short time there will be no difficulty in supplying the ever-increasing demand for trained female medical practitioners, nurses and compounders. Medical education of females.

216. The extension of the duties of medical officers on plague duty to the treatment of patients of all kinds living in the villages which they Itinerating officers.

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inspect, has already been briefly alluded to. They are provided with medical panniers specially designed to meet their requirements. This system to a great extent brings medical aid to the very door of the poor patients, who live in villages situated far away from dispensaries. There were also itinerating dispensaries in operation during the year in Hissar, Karnál and Lyallpur Districts, each in charge of a Sub-Assistant Surgeon, who journeys from village to village with the medical panniers. The proper sphere of such dispensaries is in supplementing the work of the stationary institutions in times of epidemic disease and giving medical aid in areas without any stationary dispensaries.

Leper asylums.

217. The statistics of the leper asylums have recently been furnished. These institutions are nearly all managed by missionary societies. It is a matter of congratulation that the leper population is fast decreasing, and, if the present conditions continue, there will be, it is hoped, very few lepers in the Punjab in 30 years' time.

### PASTEUR INSTITUTE.

General.

218. During the year 1913, 3,980 persons attended the institute and underwent a course of anti-rabic treatment; whilst 402 others were advised that treatment was not considered necessary in their case as they were not exposed to any danger of infection. Amongst the number treated, 48 succumbed to hydrophobia, of whom 46 were Indians and 2 Europeans. Out of these, however, only 29 cases or ·72 per cent. are to be considered as failures of treatment, for the others died either during the course of treatment or within 15 days afterwards, which means that these cases had not reached the institute in time to receive the full benefit of the treatment. The percentage of failures in 1912 was ·56. In its capacity of Provincial Laboratory the institute reported on 1,469 specimens as compared with 1,104 in 1912.

### *LUNATIC ASYLUM.*

General.

219. The number of inmates in the Asylum continues to increase, and the daily average strength this year amounted to 709, the highest on record. The number of patients cured dropped to 124 as compared with 155 last year. The year, on the whole, was a healthy one, and there was a very substantial reduction in the number of the daily average sick. Cholera again appeared, but immediate and effective measures were taken, so that the disease only attacked four of the inmates. The occurrence of no less than 3 escapes, 2 murders and 1 suicide is disquieting. Special enquiries were made in these cases, and it appeared that the primary cause of the escapes was negligence on the part of the attendants, the standard of efficiency among whom is at present low. It is hoped that the appointment of a European warder and two retired non-commissioned officers of the Indian Army as warders, which has recently been sanctioned, will be effectual in preventing occurrences of this nature. Proposals are also being considered for increasing the numbers and the pay of the staff. Sanction has recently been given to considerable alterations and additions to the buildings and also to the installation of electric lights and fans. An improvement in lighting will add materially to the comfort and convenience of the inmates and will also help to prevent escapes.

## 51.—Sanitation.

Urban sanitation.

220. Activity in the construction of sanitary works can almost be said to be increasing by geometrical progression. This may be ascribed not only to increased interest in and desire for better things, but also to the increased possibilities due to the generous grants made by the Government of India for sanitation. The fact that grants-in-aid are made to deserving cases has encouraged municipal committees to proceed with the preparation of schemes for drainage and water-works which a few years ago would have been outside the realm of possibility; it is to be hoped now that the more important towns will rapidly attain a satisfactory sanitary

condition : this is very desirable not only for the sake of the towns themselves but because they are centres of traffic and will be important educational object-lessons in sanitation to others than the inhabitants.

The great fault to be found in all towns at present is not so much the want of good water or a good drainage system, but of the recognition of the responsibility of the individual and the proper administration of the Municipal Act. It may truly be said that the sanitary provisions of the Act are a dead letter in the majority of towns. No town can possibly be anything but insanitary, though it may have the most perfect sewage system and the best possible water-supply, unless the Act is administered and faults brought home to the individual and corrected ; such administration is one of the most potent factors in educational hygiene. The tendency at present is to pay attention to these problems which can be solved by financial assistance from the outside and to neglect those requiring internal organisation and administration, particularly conservancy and scavenging, the prevention of nuisance, the cleansing and drainage of private compounds and houses, the control of building, the regulation of the food supply and of offensive trades.

221. The comparative healthiness of villages is a well-known fact testified every year by the considerable excess of the urban over the rural death-rate and, in consequence, the beginnings of sanitary effort are naturally directed particularly to towns ; moreover, the stirring of the sanitary conscience is more evident in towns than in villages and the townsman is becoming better educated as to his hygienic rights ; in towns, therefore, it is possible to achieve results which could not at present be attempted in villages. **Rural sanitation.**

The rural death-rate, however, is high, no matter for surprise to those who are cognisant of the insanitary conditions obtaining in villages generally, and the importance of reducing it has not been lost sight of. Up to the present, however, effort has been confined to encouraging the provision of good water, a considerable amount of well construction, repairing and cleansing being undertaken every year, to the keeping of village sanitary note-books, and to the giving of rewards for good sanitary condition. Neither of the last two methods, however, have met with success.

Rural sanitation has begun to attract more public attention ; it has been the subject of discussion in the Provincial Council, it was considered at the Punjab Sanitary Conference, and a Government resolution has been issued on the subject. It is proposed that a definite beginning shall be made by endeavouring to put certain selected villages in each district in as good sanitary condition as circumstances permit ; such villages will be those of particular importance from their proximity to main roads, to places where fairs are held and to important towns, such position making them particularly dangerous as reception and distributing centres for disease and also particularly appropriate as object-lessons to the people.

222. The expenditure during the year by the district boards and municipalities on sanitation was normal. **Expenditure by local bodies.**

223. The demands on the Sanitary Department have steadily increased, and Government has appointed a second Deputy Sanitary Commissioner and has also decided that, in addition to the cities of Lahore and Amritsar, the five towns next in importance, Multán, Ráwalpindi, Siálkot, Jullundur and Ludhiána, are to be provided with Health Officers, and that the health departments of all the more important municipalities are to be strengthened by insisting on the appointment of a certain minimum number of properly qualified Sanitary Inspectors. A six months' course of training has been arranged for, to enable the Punjab men to qualify for possible future appointments. The course is intended to be as practical as possible, **General.**

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and includes lectures and demonstrations on general hygiene, on minor sanitary engineering, and on municipal hygiene, and includes a period of actual working with the Lahore Sanitary Inspectors.

## 52.—Vaccination.

General.

224. The total number of operations performed by all establishments during the triennium 1911—1914 was 2,812,605, and during the preceding triennium 2,104,509. Of the increase 395,746 were primary and 312,350 revaccinations. The principal reason for the increase in primary vaccination is that early in the preceding triennium the Province suffered terribly from malaria, which enormously reduced vaccination ; a contributary factor in the increase of re-vaccination was the severe epidemic of small-pox in 1912-13 ; this factor ceased to operate in the middle of 1913 and so in 1913-14 there was a falling-off. Opposition to re-vaccination is still experienced in all parts of the Province, and epidemics seem only temporarily to overcome it. The percentage of successful operations to the total performed in which the results were known continued high, but only 78 per cent. of the children under one year of age available for vaccination in 1913-14 in the municipal towns to which the Vaccination Act applies, were successfully vaccinated. In towns, where the Act is not enforced, the percentage was 69, and it is evident that municipal authorities do not fully realise their responsibility in this connection.

The cost of the department amounted to Rs. 1,33,731 in 1913-14, an increase of Rs. 7,919 on the previous year. The work of the Vaccine Institute was satisfactory.

E. 1913/14.

## CHAPTER VII.

# INSTRUCTION.

Detailed information on the subjects dealt with in this Chapter will be found in the report and statistical tables noted below :—

PROVINCIAL REPORTS.

*Education.*—(1) Report on the Progress of Education in the Punjab for the year 1913-14.

(2) Report on the Operations of the Department of Agriculture, Punjab, for the year ending June 30th, 1914.

(3) Annual Report of the Punjab Veterinary College and of the Civil Veterinary Department, Punjab, for the year 1913-14.

*Arts and Sciences.*—Report on the working of the Lahore Museum for the year 1913-14.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

*Education, Literature and Press.*—Statistics of British India, Part III, Educational.

### 53.—General system of Public Instruction.

[ *Vide* pages 173—184 of the Administration Report for 1911-12. ]

### 54.—Education.

GENERAL SUMMARY.

225. The chief features of the educational history of the year 1913-14 have been a large addition to the number of pupils and institutions, especially secondary schools; an equally marked increase in the number of teachers employed, and in the output of trained teachers; and a continuous activity in the erection and improvement of school buildings of all kinds throughout the province; while among instructional developments may be mentioned the appointment of special inspecting officers to report and advise on the teaching of science, drawing, and (in the case of girls' schools) kindergarten methods. The Mayo School of Industrial Art has been provided with large new workshops, and an additional staff of technical instructors has been sanctioned; several new industrial schools have been opened; and among buildings recently erected may be mentioned the biological laboratory of the Government College, which was almost completed by the close of the year. The Victoria School for girls, Lahore, was made a Government institution and the staff and equipment were improved.

226. The number of educational institutions in the province increased by over six hundred, and the attendance by nearly thirty-four thousand. The total expenditure on all kinds of public instruction advanced by 9 lakhs of rupees to over 93 lakhs of which more than 50 lakhs were contributed directly or indirectly by Government, *viz.*, 30½ lakhs from Provincial and 20 lakhs from Imperial funds; while the proportion of the expenditure raised from fees was 24 per cent. as last year. More than four hundred new school buildings or extensions of existing buildings were either erected or in course of erection. The percentage of school attendance of the estimated total population of school-going age has risen from 21·37 to 22·79 in the case of boys, and from 4·31 to 4·76 in that of girls. Attend-

ance is now nearly double what it was ten years ago, and the annual expenditure on education has risen by 138 per cent. within the same period.

Twelve additional posts of Assistant District Inspectors of School, were sanctioned during the year and the re-organization of the staff of Inspectresses, which now consists of a chief Inspectress and her assistant and an Inspectress for each Division, was brought into effect.

The total expenditure of the district boards on education rose from 16 to nearly 22 lakhs, out of which 10½ lakhs were spent on maintenance of primary schools and 7 lakhs on school buildings and equipment against less than 4 lakhs in the previous year. This large increase was rendered possible by the liberal imperial grants. The total expenditure of municipal committees, on the other hand, only rose from about 4 to a little more than 4½ lakhs, part of which new expenditure was defrayed by increased receipts from fees and by salary grants received from Provincial revenues for vernacular schools. In some cases the additional educational grants were used merely to set loose funds, formerly spent on education, for other purposes; and there is little evidence that the municipal authorities realize their duty of extending elementary education, the tendency being to assume that the local high schools will provide it.

Much activity was shown by various denominational agencies during the year in opening Anglo-Vernacular secondary schools, especially high schools, 7 of which have been opened, 3 by the Muhammadan, 1 by the Sikh, and 3 by the Hindu community.

## Primary Schools.

227. A very great increase took place, as was to be expected, in primary schools. Four hundred and sixty-nine schools for boys, and 84 new primary schools for girls, were opened in the province and the number of pupils increased by no less than 27,647, of whom 22,892 were boys and 4,755 were girls, as compared with a corresponding increase of about 20,669 last year. The total number of children receiving instruction in the public primary schools in the Punjab is now well over a quarter of a million (257,000). With this large and steadily growing numerical expansion it is most satisfactory to notice a continued striving towards greater efficiency. Notwithstanding an increase of over 1,000 in the number of primary school teachers, the proportion of trained teachers to untrained shows a distinct improvement, and as the result of introduction of a more liberal scale of pay and allowances, the calling of teachers in primary schools is now becoming a popular one.

There has been a satisfactory addition to the number of agriculturists' children at school; the proportion of such children varies from 36 per cent. in the Lahore Division to 57 per cent. in Jullundur. In the latter division where the number of pupils has not risen at the same rate as in the previous year, notwithstanding a larger increase of schools, a policy has been followed of restricting numbers to reasonable limits and supplementing staff on a fixed ratio of teachers to pupils, and improving buildings of existing schools, before undertaking a marked extension of primary education. In board schools the ratio of pupils to teachers, 36 to 1 in the last quinquennium, is now 32 to 1. Internally, therefore, marked progress has already been made towards greater efficiency in board school education. Meantime the new rates of grant have combined with popular demand to encourage a large increase in the 'so-called indigenous type of school, many of which have improved up to grant-in-aid standard. The Ambála and Multán Inspectors also refer to the effect of the new rates of grants in increasing the number of elementary schools. "It is a hopeful sign," the Lahore Inspector says, "that all communities, Hindu, Sikh and Muhammadan, in this division have begun to open elementary schools, and local bodies are never slow to subsidise them."

228. The direct expenditure from all sources on primary schools increased by Rs. 1,73,949 to Rs. 11,79,364. There was a slight increase in fee-receipts, but virtually the whole of the extra expenditure was borne by district funds, with the aid of the new grants. It is satisfactory to find that the amount paid by the district boards in grants-in-aid to primary or elementary schools for boys rose from Rs. 64,679 to Rs. 89,623, showing that in addition to the opening of board schools private enterprise is receiving proportionate encouragement. Ten years ago the amount paid in this way was only Rs. 28,627.

A further step towards free primary education was taken during the year, by raising the authorised proportion of non-agriculturist pupils who can be exempted from fees on account of poverty to 25 per cent. of the total number. Thus in an average country school where at least half of the pupils are children of agriculturists or village *kamins* and as such exempted from payment, fees (which range from one anna to five annas per month) would be charged in the case of only a quarter of the children in attendance, so that the local contribution to the cost of the school would be trifling.

229. The new curriculum for primary schools seems to be generally approved, its distinctive features being a combination of literary training with practical instruction in certain subjects. Combined with this new course great endeavours are being made to organize the work so as to permit of shorter hours to let the boys out in time to help their parents and so meet the criticism sometimes levied that primary education tends to make an agriculturist's boy a hot-house plant, unfit and unwilling to be a farmer. In some places village school committees have been formed in order that each school should be regarded as an asset of the village, for the success of which the residents are in some measure responsible. Such committees have not done much yet, but in Amritsar they are beginning to prove of use.

## Secondary Schools.

230. The number of secondary schools increased from 308 to 344 and that of the pupils in them from 92,815 to 97,570. Of the 36 newly recognized schools, 9 were High, 20 Anglo-Vernacular Middle and 7 Vernacular Middle. The activity shown by the Sikh community in starting new secondary schools has been particularly noticeable in recent years, and a similar movement by Muhammadans is now on foot. The unprecedented increase in the secondary schools which is in progress is not without its dangers unless means can be adopted to ensure that the education imparted in them is thorough and useful. Otherwise, prolongation of school life is liable to result in producing a number of half educated and undisciplined youths who cannot find employment and who have missed opportunities of being trained to avocations for which they are suited. The reality of this danger has been brought home by the unsatisfactory tendencies in the matter of conduct and discipline manifesting themselves in some institutions, more especially in the Lahore Division, and which are attributed to the dearth of strong headmasters and the want of moral calibre amongst the subordinate teachers.

## Collegiate Education.

231. Including the Oriental College, the number of Arts Colleges affiliated to the Punjab University increased from 9 to 10, a college class having been opened in the Kinnaird High School for girls in Lahore, which class was attended by 6 students. The total number of students has increased by 403 to 3,176, and at the same time the examination results show a decided improvement in the percentage of successes in all except the M.A. and M.Sc. examinations in which the total number of

candidates is comparatively small. The course of lectures delivered by University lecturers from England was a most successful innovation, and the experiment is being repeated this year. Among the changes in the University system may be mentioned those relating to the tenure, number and value of University scholarships, which have been raised in amount and redistributed in consequence of the new mode of awarding Government scholarships. Extensions of affiliation were granted to various colleges in particular subjects.

### Training Institutions.

232. The competition for entrance into the Central Training College is keener than ever and the number admitted in the past year exceeds the record of all the previous years. The large proportion of graduates now seeking admission to the Training College is another hopeful sign of the times. The numbers are at present too large for efficient supervision and close personal intercourse between the students and the staff, and there is a necessity for a separate Training College outside Lahore for junior teachers. It is also proposed to establish a new Training College at Jullundur.

233. The progress of normal schools and training classes continues to be satisfactory and it is interesting to note that the number of students in the Normal School for Women at Lahore rose from 35 to 64, of whom 44 were boarders. The women come from all parts of the province, except a few outlying districts.

234. A number of training classes for teachers of elementary or lower primary schools have been conducted as formerlyin connection with the vernacular middle and other secondary schools at various centres. The training lasts from 6 to 9 months: the general opinion is that these local training classes are a most useful adjunct to the normal schools and their cost is trifling in comparison. The defect of normal school training is that it is liable to become artificial; the students have few opportunities of putting theories into practice under the conditions which they will have afterwards to face. At the Central Training College this difficulty has been partly overcome by deputing students to the various Lahore schools, where they carried on the work of the schools for a fortnight under the supervision of the college staff. The managers and teachers of the schools co-operated to make the experiment a success, and it was considered to be of benefit to the school pupils as well as to the students of the college.

### Professional and Technical Education.

235. Among the professional and technical institutions the most noticeable features are the great demand for admission into the Veterinary College and the difficulty experienced in inducing recruits to join the Agricultural College at Lyallpur. It is hoped that the arrangement recently sanctioned for increasing the scholarships and improving the prospects of the subordinate agricultural service will attract more students to the college, which is admirably equipped for the teaching of practical and scientific agriculture. The restriction introduced by the Chief Court on the number of pleaders has had its inevitable effect on the Law College, where the number of students fell by nearly one-third. The Mayo School of Art has had a successful year and the development scheme, made with a view to bringing the work of the school into closer touch with the requirements and the present conditions of the crafts of the Punjab, is gradually being carried out, the present year being notable for the reorganization and strengthening of the staff. The new workshop buildings have been completed and a show-room has been opened for the exhibition of samples of craft work done in the school. Forty-four students left the school during the year of whom 29 are known to have

obtained employment on salaries ranging from Rs. 25 to Rs. 60 per mensem.

236. The number of industrial schools in the province increased from 18 with 1,767 pupils to 24 with 2,249 pupils, and some ordinary schools have industrial classes attached. It will thus be seen that there has been a considerable expansion of industrial training, but the movement is hampered by the lack of competent teachers, whom it will be the function of the Mayo School of Art, when fully re-organized, to supply.

### EDUCATION OF INDIAN WOMEN.

237. The num be rof schools rose from 744 to 830 (6 High, 33 Middle, 791 Primary) and that of pupils from 37,445 to 42,740, or by over 14 per cent. In these figures the Normal School for Women and Queen Mary's College, Lahore, have not been included. The progress is retarded by the want of qualified teachers.

An increasing desire to continue study to a higher stage is shown by the addition of collegiate classes to the Kinnaird High School, Lahore: six students have joined. At the Victoria School, Lahore, girls are prepared for the Oriental title examinations of the University, and teachers in secondary schools frequently study for these examinations. Twenty-one girls appeared in the Matriculation examination; in the Middle School examination there were 214 candidates against 162 in the previous years: and there is a strong demand in many places for new middle schools. The framing of suitable curricula for girls' schools has occupied much attention in recent years, and curricula which are considered suitable for vernacular and Anglo-vernacular girls' schools have been issued by the Department. It is recognised that as the education of girls in this country is at an early stage of development, the courses of study should be elastic and adaptable, and should not necessarily be modelled on those for boys' schools. Many middle schools, for instance, as was pointed out last year, prefer a scheme of studies confined to languages, music, needlework, and religious instruction. In modern methods of instruction Queen Mary's College, Lahore, takes the lead, while at the other extreme are the rural elementary schools in charge of men teachers of the old-fashioned type or women of the slenderest educational qualifications.

### EDUCATION OF SPECIAL CLASSES.

**Education of Europeans.**

238. The number of schools remains 35; but there has been an increase of one in the number of public schools owing to the opening of a primary school at Bhatinda. The number of pupils rose slightly and also the expenditure.

The year was one of steady progress. Thanks to the efforts of the religious and other bodies managing schools, and to the increased grants from Government, there is no longer any difficulty about obtaining a good education in a hill climate at a moderate expense for children of the community concerned. The continued improvement of the teaching staff must be kept in view as the principal object of future endeavour, together with developments on certain special lines, as in the teaching of science, domestic economy and drawing. An interesting feature is the growth of the Boy Scout movement, the total number now amounting to 300, of whom 240 have joined last year.

**Education of Muhammadans.**

239. Much interest has been aroused recently in the question of the measures which might be taken to further Muhammadan education. In April 1913 the Government of India addressed the Local Governments on the subject, suggesting lines of enquiry. In reply the Punjab Government supplied statistics and general information as to the state of Muhammadan education in the province and the special measures already

adopted to accelerate progress. It was pointed out that the backwardness of the community was especially noticeable at the higher educational stages, and in this connection the opportunity was taken of urging the claim of the Islamia College, Lahore, to a substantial assistance in case funds should be available, so that the college might be provided with an adequate teaching staff and removed to a locality where there would be room for expansion. At the same time the Anjuman-i-Himayat-i-Islam were addressed on the general question of Muhammadan education, while the managing body of the Islamia College were advised to formulate schemes of improvement for that institution. The outcome, so far as the college is concerned, has been most satisfactory, the Government of India having sanctioned a liberal recurring grant of Rs. 30,000 for improved staff and equipment. The educational questions referred to the Anjuman were discussed during the year by the leaders of Muhammadan opinion with a view to putting forward definite suggestions.

In primary education in the province as a whole, the Muhammadan community holds its own. Development in secondary and collegiate education is far slower, but it is only natural that ~~the effects~~ of the new stimulus given to Muhammadan education should make themselves apparent first in the primary schools, and the enthusiasm which the Muhammadan community is now displaying in the cause of education supported, as it is, by substantial help from Government, cannot fail to yield excellent results.

**Aitchison College.**

240. At the end of the year there were 108 boys on the College roll, 17 having left and 10 joined during the year. The average age of the boys who joined was $10\frac{3}{4}$ years, which is a further improvement on the previous year's figure which was $11\frac{1}{3}$. The average daily attendance was 92. Twelve boys entered for the Diploma examination and 7 of them passed. Two passed in the aggregate but failed in English and Mathematics, and three failed. The annual competition in athletics, with the Mayo College, Ajmere, resulted in favour of the Mayo College, which won back the challenge shield wrested from them in the previous year. A successful old boys' meeting was held early in April 1913 ; 42 old boys assembled and contests were held in various sports. The discipline and health of the College were good throughout the year and the former especially was favourably commented upon by the Inspector.

A preparatory school for the Aitchison College has been started. Boys will be able to enter this at an earlier age than is possible at the College. The gain to the College which at present often admits boys wholly or partly untrained or badly trained, should be considerable.

## 55.—Literature and the Press.

### LITERATURE.

**Books registered.**

241. The aggregate number of publications catalogued has risen by 110 to 1,642, but that of copyrights registered has fallen by 64. This was only to be expected, the new Copyright Act having dispensed with the necessity of formal registration of copyright. Some authors, however, still continue to apply for it through Deputy Commissioners after crediting the amount of the prescribed fee to the Government Treasury, and in such cases copyright has to be registered as before.

Of the 1,642 works 1,176 were original, 353 were republications and 113 were translations.

Efforts were made during the year under report to ascertain if the managers of printing presses submitted for registration under the rules all the books printed by them, and it was found that several of them were unpunctual in doing so. Steps were, therefore, taken to remind them of the consequences of their neglect of duties in this respect, with the result that about 800 publications were received during the first quarter of the current year ; these will be dealt with in the next report.

The greatest number of works in any one language was in Punjabi which language, for the first time, took precedence in this respect over Urdu; this is probably due to the exclusion of the Delhi Province—a main source of Urdu works—from the returns. English comes next in this order of precedence with about a quarter the number of the publications in Urdu and, after English, comes Hindi with less than half the number in English and a decrease of about 31 per cent. on its own total of the previous year. Works in Sindhi number 34 as against 13.

As before "Poetry" claims the largest number of publications followed by "Religion" which is also the subject matter of several poetical works. Books on Art, History and Science show a satisfactory tendency to increase, but the decrease of "Biographies" and the absence of any book on "Travels" do not speak well for popular taste. Some Punjabi novels have been written with the object of eradicating evil customs and encouraging female education. Books on history have increased in number and improved somewhat in quality, but the reverse is the case in regard to biographies, while works on art mostly relate to industrial processes and those on language are almost entirely text-books. Works on medicine, however, are of interest, and praiseworthy attempts have been made to compile a Yunani and Vedic Materia Medica, consisting of the specifics of famous Hakims and Vaids: veterinary medicine has also received attention. In poetry, considerable talent for writing in metrical language is apparent from the volume of verse produced during the year, but little true poetry is met with. Political and especially seditious literature has become almost extinct in the Punjab as a result of the Press Act, and philosophy seems to be in disfavour. Religion continues, however, to be an inspiring force, and there is a large number of commentaries and of translations of the sacred books of different religions.

## THE PRESS.

242. At the beginning of the year 1913 the total number of periodicals and newspapers of all kinds in existence in the Punjab and the North-West Frontier and Delhi Provinces was 230, of which 197 were published in the Punjab. During the year under report 34 new periodicals came into existence, while of the 264 papers thus arrived at 50 ceased publication. The following table shews at a glance the progress in newspaper activity recorded during the year in the various provinces:— **Newspapers.**

| | Existing at the beginning of year. | Came into existence during year. | Ceased to exist during the year. | Existing at the end of year. | Net decrease. |
|---|---|---|---|---|---|
| Punjab ... ... ... | 197 | 31 | 40 | 188 | 9 |
| North-West Frontier Province ... | 2 | 2 | 2 | 2 | ... |
| Delhi ... ... ... | 31 | 1 | 8 | 24 | 7 |
| Total ... | 230 | 34 | 50 | 214 | 16 |

Of the 264 papers and periodicals, which were in existence during the whole or part of the year, the Delhi Province claimed 32, the North-West Frontier Province 4 and the Punjab the remaining 228; while 174 were published in Urdu, 54 in English, 22 in Gurmukhi, 11 in Hindi, and one each in Roman Urdu, Urdu-Pashtu and Urdu-Hindi: the number of daily papers was 14 of which 4 were published in Delhi and the remainder in the Punjab (*viz.*, 3 in English and 7 in Urdu, four of the latter representing the Hindu community and three the Muhammadans), while weekly and monthly publications numbered 88 and 123, respectively.

Of the 228 Punjab newspapers 138 were published in Lahore and 31 in Amritsar, while other centres of journalistic activity in the Province were Simla and Qádián (9 papers each), Ráwalpindi (7), Jullundur (5), Ludhiána (4), Gujránwála (3), Siálkot and Jhang (2 each) and Multán,

Ferozepore, Jhelum, Montgomery, Gujrát, Batála, Rúpar, Tarn Tàran, Rewári, Sadhaura, Dínga (*Gujrát District*), *Pindi* Bahá-ud-din (Gujrát District), Kála (Jhelum District) and Sargodha (one each). In addition to these the capitals of the following Native States, *viz.*, Patiála, Baháwalpur, Kapúrthala and Málerkotla, boasted of one paper each.

Circulation.

243. It is impossible to procure accurate statistics of newspaper circulation, and due allowances must be made for the natural tendency of publishers to claim for their organs a larger circulation than they actually enjoy. It is, however, beyond dispute that the year 1913 witnessed a very considerable increase in the demand for newspapers, the average circulation of all papers, so far as can be ascertained, being about 3,20,000 as against 2,80,000 in 1912 and nearly 2,90,000 in 1911. If an average of six months' publication be allowed for every paper, which came into existence or ceased to exist during the year, the average periodical circulation of each paper and periodical works out at about 1,400 copies, while the following figures shew the ascertained actual circulation of the more important organs :—

| | Copies. |
|---|---|
| *English.* | |
| *Tribune (Hindu) ... ... ... | 1,957 |
| †Punjabee (Hindu) ... ... ... | 1,865 |
| ‡Comrade (Muhammadan, Delhi) ... | 2,247 |
| ‖Observer (Muhammadan) ... ... | 1,200 |
| ‡Khalsa Advocate (Sikh) ... ... | 850 |
| *Vernacular.* | |
| ‡Hindustan (Hindu) ... ... | 15,582 |
| *Zamindar (Muhammadan) ... ... | 15,000 |
| *Paisa Akhbar (Muhammadan) ... ... | 8,287 |
| ‡Fauji Akhbar (Neutral) ... ... | 6,000 |
| ‡Himala (Hindu) ... ... ... | 5,325 |
| ‡Rajput Gazette (Hindu) ... ... | 4,812 |
| ‡Curzon Gazette (Muhammadan, Delhi) ... | 4,340 |
| ‡Loyal Gazette (Hindu) ... ... | 3,960 |
| ‡Parkash (Hindu) ... ... ... | 3,950 |
| *Watan (Muhammadan) ... ... | 2,390 |
| ‖Vakil (Muhammadan) ... ... | 2,250 |
| *Jhang Sial (Hindu) ... ... | 1,800 |
| *Desh (Hindu) ... ... ... | 1,663 |

NOTE—
*denotes daily.
† „ tri-weekly.
‡ „ weekly.
‖ „ bi-weekly.

It follows from these statistics that a very large number of the 264 newspapers in existence during the year had an insignificant circulation. Hindu and Muhammadan interests were supported by journalistic activity in nearly equal degrees, but the Sikh community, which aired its views largely through the medium of Hindu newspapers, was during the year under report, scantily represented in the journalistic world. The stirring events of the year were doubtless responsible for the large extension of newspaper circulation, which is also partly due to the rapid extension of educational facilities in the province of recent years.

Executive action.

244. The total number of declarations under sections 4 and 5 of Act XXV of 1867 reported during the year was 180. Security, when demanded under the provisions of the Press Act of 1910, usually ranged from Rs. 500 to Rs. 2,000, but the " Zamindar " Press was required to deposit security amounting to Rs. 10,000 on redeclaration after forfeiture of the security originally deposited. In the majority of cases security was not demanded, while in the case of three presses the security deposited on

declaration was declared forfeited. Demands for security resulted in the closing down of two existing presses and prevented the opening of eleven new ones, while three newspapers ceased to exist and twelve failed to come into existence for the same reason.

Warnings were administered at the request of the Local Government to the publishers of seven newspapers,—*viz. Vakil, Millat, Ahl-i-Fiqah, Hunter, Arya Patrika, Bir*, and *Bharat*—in connection with articles calculated to engender feelings of class hatred and sectarian strife, while the *Hindu* was warned for publishing an article tending to excite disaffection towards Government. The proprietors of six presses had to be reminded of the necessity for compliance with certain formal requirements of the Press and Registration of Books Act (XXV of 1867).

245. The Balkan Wars and the affairs of Turkey were the chief topics of discussion in the Muhammadan Press. **Foreign affairs.**

246. The status of Indians in South Africa aroused considerable interest in the Press, both Hindu and Muhammadan, during the year. The Immigration Law, the £3 tax and the refusal of the Union Government to recognise the validity of Indian marriages were the chief objects of resentment, the marriage question being taken up with no little bitterness by the Muhammadan papers. Towards the end of the year however a more reasonable attitude prevailed and the papers, while hailing with expressions of genuine enthusiasm His Excellency the Viceroy's sympathetic speech on the subject at Madras, were prepared to accept the view that there might be arguments on the other side worth a hearing. The year closed hopefully with the announcement that a Commission of Enquiry would consider the whole matter in the near future. **Colonial affairs.**

247. As usual the questions of *Jhatka-Halal* and kine-killing were freely discussed in the Press. **Domestic affairs.**

The attempt on the life of the Viceroy at Delhi and the Lahore bomb incident gave rise to much general discussion of the subject of anarchism in India. The Press was almost unanimous in its condemnation of the use of anarchical means for political ends, enthusiastically congratulated the Viceroy on his recovery, and reiterated its strong disapproval of the methods of extremists in connection with the Lahore bomb case.

The question of self-government for India recurred frequently in the columns of the Press. The leading Hindu papers whole-heartedly preached and supported the Congress ideal in the matter, while Muhammadan papers exhibited a tendency to adopt the same policy.

248. The Conspiracy Bill, which was presented to the Imperial Council in March 1913, and was regarded as the inevitable but none the less undesirable sequel to the Seditious Meeting and Press Acts of former years, was vigorously combated in the Press, the leading Hindu organs being most conspicuous in the matter. Other Acts of the legislature attracted little attention, but the Punjab Land Alienation Act continued to be unpopular with the Hindu Press, while the question of placing a legal check on usury was actively mooted by several Muhammadan papers. The question of the constitution of the Provincial Legislative Council formed an absorbing topic of discussion, when the results of the new elections and nominations were made known, no party being entirely satisfied with the final composition of the new Council. The Hindu Press was also dissatisfied with the representation of the Punjab in the Imperial Legislative Council. **Legislation.**

249. The resignation of the Chief and Home Ministers of the Patiála State gave rise to but little comment and was soon forgotten by the Press. The affairs of Baháwalpur, however, attracted more attention in connection with the introduction of an income tax in the State. **Native States.**

INSTRUCTION.

Political organisations.

250. The Muhammadan Press was much exercised throughout the year over the split in the ranks of the All-India *Muslim League* brought about by the refusal of the old leaders, Mr. Amir Ali and Sir Agha Khan, to recognise the "mission" of Mr. Muhammad Ali and Sayad Wazir Hussain.

The affairs of the Indian National Congress did not attract much attention, though the readiness of Muhammadans to share in its counsels and adopt its general policy was approved in many quarters.

The Hindu Press expressed much disappointment with the lack of public interest in the affairs of the Punjab Hindu Sabha and Hindu Conference, but found consolation in the reflection that much of the work of these bodies was devolving on such agencies as the Arya and Brahmo Samajes.

Education.

251. The attitude of Government towards the Hindu and Muslim University schemes came in for much comment by all sections of the Press. The line taken was that the duty of Government in the sphere of education was to provide such financial assistance as might be demanded and, having done so, to leave the various communities to work out their own educational salvation. The Imperial Government's circular letter to Local Governments on the subject of Muhammadan education was well received by the Muhammadan Press. The proposal to apportion scholarships in the Arts Colleges of the Punjab on a communal basis was unfavourably received and regarded as a retrograde measure by the Hindu Press. On the subject of advanced education on western lines for girls Hindu papers waxed enthusiastic, but the majority of Muhammadan organs viewed with apprehension the extension to women of a system of education, which was justified in the case of man only by the material benefits accruing therefrom.

Miscellaneous.

552. Among other topics of discussion, which engaged the attention of the Press during the year, may be mentioned the Royal Commission on the Indian Public Services; the question of the separation of Executive and Judicial functions; the merits and demerits of the existing system of Police administration, and finally the oft-discussed problem of the Haj pilgrimage.

## 56.—Literary Societies.

(*Vide* pages 196 and 197 of the Administration Report for the year 1911-12).

## 57.—Arts and Science.

### THE LAHORE MUSEUM.

253. The total number of visitors during the year was 371,306, and the daily average was 1,055. This is a slight decrease on the previous year and is due to the institution of a weekly Students' Day, when students and others interested in arts and science alone are permitted to enter the museum. This has been much appreciated. Twelve days were reserved for pardanashin ladies and numbers took advantage of these opportunities.

The Local Government have sanctioned the grant of Rs. 25,000 for the proposed extension to the buildings, which, when built, will provide a large extra gallery and certain other rooms. The most remarkable addition in the Art and Manufactures Section of the Museum was a silver-necklet from Nepal; the Natural History Section still deteriorates for want of a capable taxidermist. The collection of pictures in the museum has been classified and arranged by Mr. S. N. Gupta who has also written descriptive notes and labels for each and is preparing a catalogue. The cion catalogues prepared by Mr. R. B. Whitehead, I.C.S., are a great acquisition and form excellent works of reference.

# CHAPTER VIII.

# ARCHÆOLOGY.

Detailed information on the subject of this chapter will be found in the annual progress reports of the Superintendent, Hindu and Buddhist Monuments, Northern Circle, Lahore, and of the Superintendent, Muhammadan and British Monuments, Northern Circle, Agra, for the year ending 31st March 1914, also in the Administration Report of the Buildings and Roads Branch, Public Works Department, Punjab, for the year 1913-14.

## 58.—Archæolcgy.

### Hindu and Buddhist Monuments.

254. In the year under review Rs. 3,870 have been expended on the preservation of Hindu and Buddhist Monuments in the Punjab. These sums have been spent principally on annual repairs, but special repairs were carried out at the Basheshar Mahadev Temple at Bajaura. Material was also collected at Baij Nath for special repairs to the famous shrine there, while proposals for the conservation of the rock-cut temples at Masrur in Kángra District are under the consideration of the Local Government; these last temples have now been notified as "protected" under Act VII of *1904*. Rock-cut temples are by no means uncommon in other parts of India, but these Masrur temples present a number of unique features. The shrines are exact representations of structural "sikharas" of the so-called Indo-Aryan type and being carved from the crowning ridge of the hill occupy, unlike the Dhamnur and other Brahmanical monolithic temples, a position of peculiar architectural advantage. The Samadh of Maharaja Ranjit Singh, together with the Samadhs of Rajas Kharak Singh and Naunihal Singh at Lahore, and the old Badshahi bridge five miles south of Karnál, have also been declared as protected monuments. No opposition has been met with and a very pleasant feature has been the willingness of the managers of shrines to avail themselves of the advantage of protection and to carry out the suggestions advanced by the Archæological Department.

### British and Muhammadan Monuments.

255. Rupees 51,600 were spent in the Punjab under this head in 1913-14, the buildings principally concerned being at Lahore. An interesting piece of excavation work has been carried out at the Lat-ki-Masjid at Hissar, where a number of underground rooms have been disclosed, and it seems likely that from these buildings an underground passage will be found communicating with the palace buildings now occupied by the Superintendent of the Government Cattle Farm. This house, it has been proposed, should be converted into a circuit house, and if this is done the surroundings will well repay clearance. There is no doubt that it would make one of the most interesting and attractive sites in the Punjab if properly treated.

The work at the Hazuri Bagh, Lahore, has been completed at a cost of Rs. 12,374, and efforts are being made to clear the surroundings of the garden which are in an untidy state. At the Badshahi Jama Masjid more than Rs. 8,000 have been spent in repairs to the east main gate, the parapet, turrets and finials of which have been rescued from their former precarious condition, sand-stone facing being reset where necessary. Various works are proceeding at Lahore Fort, the most important being the conservation of the Bari Khwabgah, and the "Roman Catholic Chapel." It is hoped soon that the red sand-stone buildings of Jahangir surrounding the court, lying between the Bari Khwabgah and the Diwan-i-'Am, will be emptied and cleared of their unsightly modern additions. Provision has